Public Utilities

FORTNIGHTLY

Volume L No. 12 December 4, 1952

DO WE NEED MORE FEDERAL POWER AUTHORITIES?

By The Honorable Len Jordan

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Automatic Adjustment Clauses in Gas Rate Schedules Part I.

By Edwin Fleischmann

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Fair Return for Natural Gas Companies

By Ralph E. Badger

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Free Flood Control by Utilities On Wisconsin Rivers

By Arno T. Lenz

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Public Utilities FORTNIGHTLY

Volume L | DECEMBER 4, 1952 | Number 12

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Articles

Feature Sections

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Pages with the Editors

OFFICIAL Washington is having difficulty adjusting its thinking to the fact that a Republican administration will come into power after two decades of Democratic régimes. This difficulty extends not merely to the more sensational issues between the two major parties which were discussed at such length during the campaign. Virtually unnoticed but all the more difficult (by very reason of the fact that the Republicans have not placed themselves on record in detail) are the dozens of other administrative policy questions.

UNDER this heading certainly must fall the question of Federal public power policy. This policy was not a real issue during the campaign between the major party candidates—however much President Truman tried to make it so. Nobody to this day knows exactly how President-elect Eisenhower or even Governor Stevenson, for that matter, would react to specific situations involving particular areas and projects.

BUT twenty years of New Deal-Fair Deal policies have channeled out some fairly well-defined grooves of thought in the various government bureaus which have to do with public power and water resource development. It is these well-worn channels which now stand in prospect of being completely changed by new and diversionary streams of thought, stemming from White House sources, after next January.

LEN JORDAN

TWENTY years are a long time and it is to be expected that subordinate officials and career personnel who will continue in these bureaus will have a difficult time reorienting themselves to a completely new pattern. How much change there will be is, of course, the big question. It will not be entirely answered until the new administration has been inaugurated and seasoned.

THIS much is known, however: General Eisenhower in his campaign speech at Boise, Idaho, on October 6th, urged an end to the present jumbled conflict of Federal power policies. He called for more local grass-roots participation in public projects and for a partnership among Federal, state, local, and business interests. This, certainly, is a change from the old line of thinking during the entire Roosevelt-Truman era.

IT so happens that President-elect Eisenhower's call for an interstate compact as an instrument for bringing about such local participation parallels quite closely the views of a number of western governors of the reclamation states. Both business and left-wing publications have speculated that the new President may be taking some of his ideas from this group, just as he has depended on Republican governors for so much of his political success to date, including his nomination in Chicago last July.

AT any rate, we feel that it is timely and perhaps significant to bring our readers a clear statement of the overall views of one of these western governors on valley authorities, as compared with interstate compacts in water re-

EDWIN FLEISCHMANN

source development. He is the Honorable Len Jordan, governor of Idaho and author of the opening article in this issue.

Born in Mt. Pleasant, Utah, and educated at the Utah State Agricultural College and the University of Oregon (AB, '23), Governor Jordan followed a business career as head of an automobile sales company before turning to politics as a member of the legislature in 1947. He was elected governor in 1951. His article in this issue is a restatement, in article form, of an address which he gave to the Economic Club of Detroit late in September.

* * * *

Shortly after the election, the Office of Price Stabilization in Washington issued a long-delayed order designed to curb the operation of escalator clauses in natural gas supply contracts. This involves considerable controversy over the question of whether price ceilings on natural gas production should be abandoned or whether it is in the public interest to hold the line even to the extent of curbing automatic contract adjustments.

We are fortunate, therefore, in being able to present a very timely and careful analysis of this situation in the form of a 2-part article on "Automatic Adjustment Clauses in Gas Rate Schedules," the first part of which appears in this issue. Edwin Fleischmann, author of this series (beginning on page 826), is a consulting engineer of San Francisco and formerly a member of the staff of Gilbert Associates, Inc., engineers and consultants of New York. He is a graduate of Harvard College and Harvard Engineering School and spent some years with Westinghouse and the Niagara Hudson system before joining the old War Production Board for duty with the Office of War Utilities during World War II.

* * * *

Arno T. Lenz, whose article on "Free Flood Control by Utility Companies" begins on page 843, is professor of civil engineering at the University of Wisconsin, his alma mater (BS, '28; MS, '30; CE, '37; and PhD, '40). Professor Lenz has been teaching at the university's college of engineering since 1928 and is at present director of the hydraulic and sanitary laboratory. He has also done professional and consulting service for a number of government agencies and public utility companies.

* * * *

Among the important decisions preprinted from *Public Utilities Reports* in the back of this number, may be found the following:

The Maryland Circuit Court holds that public utility rates must be based upon value rather than upon investment. (See page 129.)

Price fluctuations should not be considered in fixing value for rate-making purposes, according to the Maryland Circuit Court. (See page 129.)

The Idaho commission holds that a current cost adjustment, to bring investment in plant down to a period some time beyond the actual close of a test year, is not a proper component in a telephone company's rate base unless all other exhibits are adjusted accordingly. (See page 151.)

The next number of this magazine will be out December 18th.

The Editors

Coming IN THE NEXT ISSUE

★

THE ELECTRIC LIGHT AND POWER INDUSTRY LOOKING AHEAD

Bayard L. England, president of the Edison Electric Institute, has recently given a series of provocative talks on the past, present, and future of the electric utility business. This article is a collection of the most cogent points made by Mr. England, compiled and unified in the form of a single article. It is one of the most compelling statements of the case for the electric utility industry and its promising future which has been made in recent times.

AUTOMATIC ADJUSTMENT CLAUSES IN GAS RATE SCHEDULES. PART II.

Recently, OPS handed down its long-awaited order curbing the operation of escalator clauses in natural gas contracts, to the extent that they would increase collateral rates (not directly under such contracts) above production price ceilings. The result of this controversial regulation has been to focus new attention on escalator clauses in natural gas supply contracts and rate schedules. We are fortunate in having on hand at this time an authoritative analysis of automatic adjustment clauses in gas rate schedules by Edwin Fleischmann, San Francisco consulting engineer. This is the second and concluding instalment of this timely topic. It describes the different types of automatic adjustment clauses in a very clear and readable fashion.

IS URBAN TRANSPORTATION IN DANGER OF COLLAPSE?

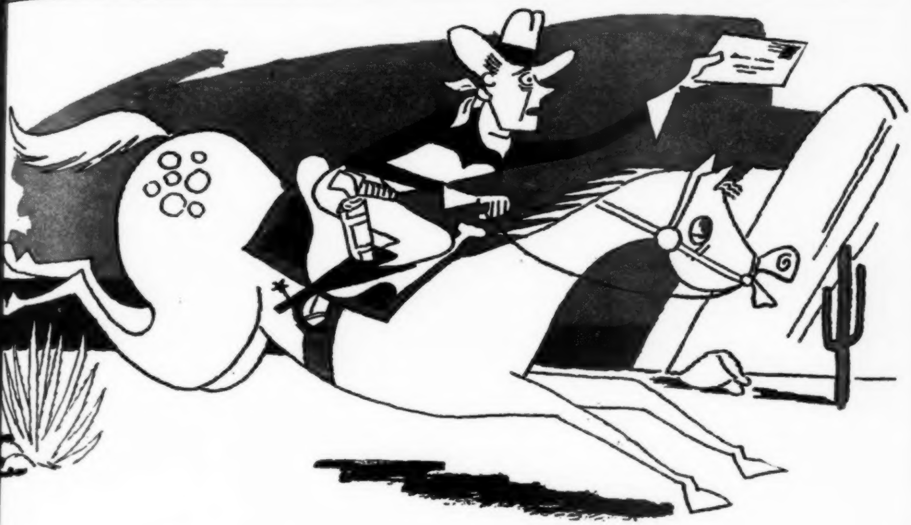
Here is a thoughtful analysis of the problems of transit, aside from the financial matters. Although primarily based on experience on the West coast, this discussion of what ails the transit business by Henry E. Jordan, chief engineer of the Long Beach, California, bureau of public utilities, should be of profit and value to all people concerned with its operations.

NATURAL GAS FOR THE PACIFIC NORTHWEST?

New England seems to be having enough difficulty getting final clearance of a natural gas supply for that rich and populace market. But the Pacific Northwest faces an even more complicated situation. Not only the problems of regulatory supervision and industrial rivalry, but even international aspects must be considered. John E. Bemis, professional writer of Spokane, Washington, gives us an account of what must be done to bring natural gas into the Pacific Northwest.

★

Also . . . ***Special financial news, digests, and interpretations of court and commission decisions, general news happenings, reviews, Washington gossip, and other features of interest to public utility regulators, companies, executives, financial experts, employees, investors, and others.***



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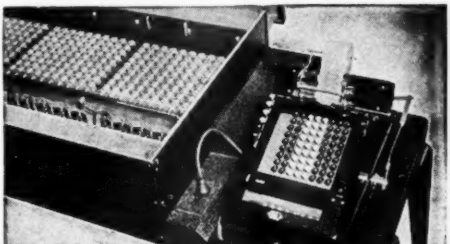

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Remarkable Remarks

"There never was in the world two opinions alike."
—Montaigne

Oscar Chapman
Secretary of Interior.

"Who knows, I may be back in four years."

William F. Wrightnour
Training director, U. S. Rubber Company, tire division.

"A good executive is the man who knows how to delegate work to individuals and has the guts to let them do it."

Herbert Hoover
Former President of the United States.

"[Science and engineering have] periodically saved the world from impoverishment by the wars created through lost statesmanship. That is our hope for our nation today."

Laurence F. Whittemore
President, Brown Company.

"Someone once said that the power to tax is the power to destroy. I say that the power to regulate is the power to destroy."

Timothy G. Sughrue
President, Boston & Maine Railroad.

"This railroad industry is in danger of strangulation by governmental red tape which would be followed by bankruptcy, and the next step would be nationalization."

Earl G. Planty
Executive counselor, Johnson & Johnson.

"Today's business world is one of dynamic movement. Things change constantly and men must continue to grow and upgrade themselves intellectually or they stagnate."

D. A. Hulcy
President, Lone Star Gas Company.

"We already have an economy that is two-thirds free and one-third government controlled. Government is taking one dollar out of every three we earn, and the heat is on to run the take to higher levels."

Thomas R. Jones
President, Daystrom, Inc.

"[The public] seems to have become accustomed to the government's excessive spending rate. Like a mistreated horse who finally accepts his beating quietly, we have become accustomed to giving up a good part of our income in taxes, both direct and indirect."

Elmer L. Lindseth
President, The Cleveland Electric Illuminating Company.

"Europeans envy us our standard of living. Yet they have failed to realize the basic principle that a standard of living is produced, that it is not obtained as a gift from someone. They have failed to understand that no one—government or individual—can give away what is not first produced by someone somewhere. And that someone in the long run must be themselves."

BEN H. HAZEN
President, United States Savings & Loan League.

"It is the Capitalists of modest wealth and of tomorrow's achievement who are the great victims of present Socialism and the ultimate dictatorship which is inevitable under the course we are now pursuing."

JOHN E. TILFORD
President, Louisville & Nashville Railroad.

"The ultimate solvency and salvation of our railroads demand that those having a stake in the future of railroads undertake vigorously and relentlessly to bring . . . facts before the bar of public opinion."

REESE H. TAYLOR
President, Union Oil Company of California.

"The primary detriment to industrial progress and prosperity today is the suicidal tax burden which excessive government spending is loading on the individual American citizen. And here we should acknowledge that all taxes, in the long run, come from the pockets and purses of the people—not from business and industry."

WILLIAM C. MULLENDORE
President, Southern California Edison Company.

"The pernicious idea that government is the principal agency or force which men must use, and upon which they must rely, in an advancing civilization, has brought about such a surrender of power to our central government, and hence such a concentration of power therein, that, despite the prevailing popular impression that we are free because we are a democracy, we are, in fact, no longer free citizens but impotent, dependent subjects of government unlimited."

DEANE W. MALOTT
President, Cornell University.

"[Because of the] dangers and disqualifications [of Federal aid to education], we are left with the corporations as a source of support, to come to the rescue of education in the great fields of the humanities and the social sciences, where business has not in the past been accustomed to help. Investment in the young men and young women of America is an investment in the fundamental future of America. It is a challenge which American business will disregard at its peril."

ROBERT A. TAFT
U. S. Senator from Ohio.

"Liberty is the right of man to live his own life and choose his own job; the right of every family to spend its earnings on those things which it desires and not have them spent for it by a benevolent government; liberty of the farmer to run his own farm; liberty of the workman to work at his chosen occupation in life; liberty of speech and of the press; liberty to express ideas and to have those ideas taught if anyone is interested enough to teach them; liberty of every community to decide how its children shall be educated and its health and welfare activities and local government be conducted; liberty of the businessman to run his own business the way he thinks it ought to be run without interference and limitation by government, or discouragement by excessive taxes."

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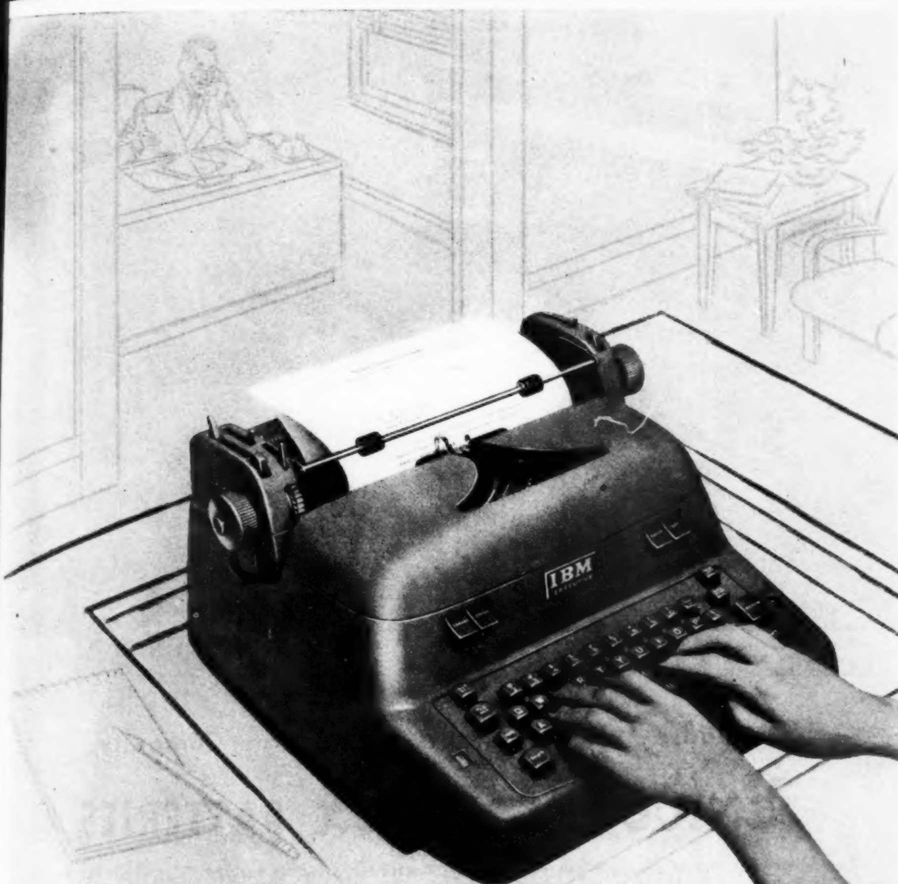

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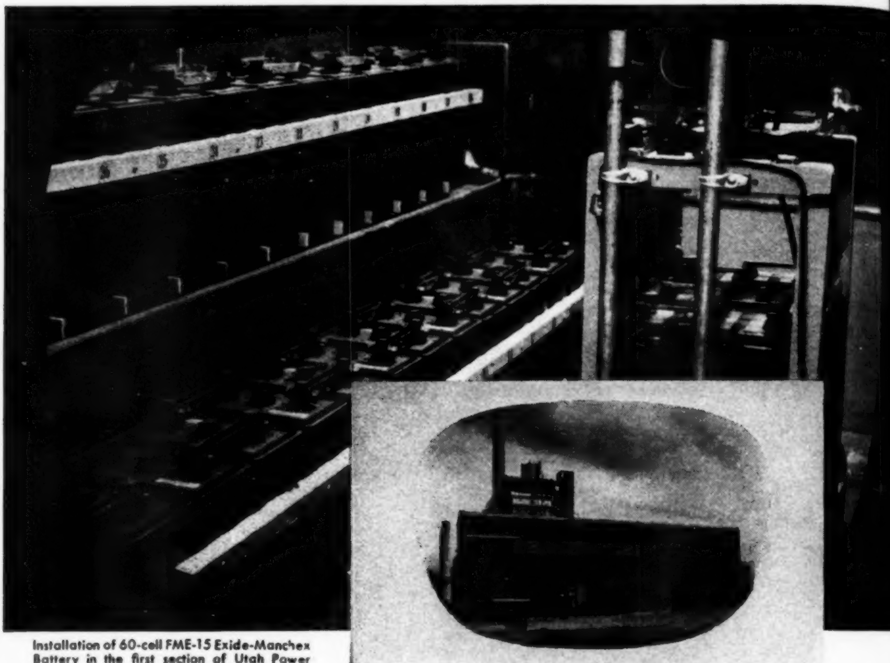

Installation of 60-cell FME-15 Exide-Manchex Battery in the first section of Utah Power & Light Company's Gadsby Plant.

Gadsby Plant of Utah Power & Light Company

In Gadsby plant of Utah Power & Light Company

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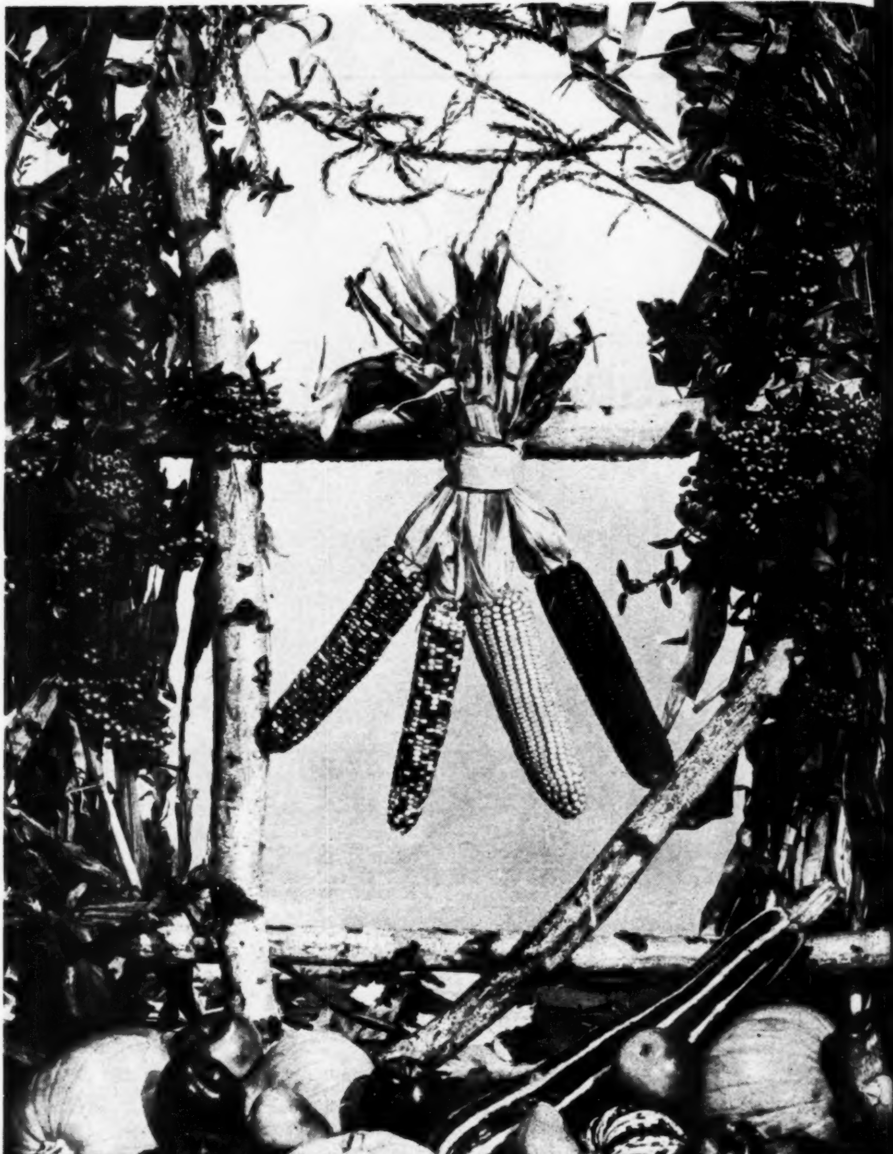
Utilities Almanack

December

4	Th	¶ *Liquefied Petroleum Gas Asso. begins directors meeting, New Orleans, La., 1952.* ¶ *Public Utilities Advertising Asso. begins meeting, Atlantic City, N. J., 1952.*
5	F	¶ *New England Gas Association, Industrial Division, begins meeting, Boston, Mass., 1952.*
6	Sa	¶ *National Power Show ends, Grand Central Palace, New York, N. Y., 1952.*
7	S	¶ *Edison Electric Institute, Industrial Relations Committee, will hold one-day meeting, New York, N. Y., Dec. 18, 1952.*
8	M	¶ *Edison Electric Institute, Industrial Power and Heating Section, begins meeting, New Orleans, La., 1952.*
9	Tu	¶ *Edison Electric Institute-American Gas Association, Planning Committee, ends two-day meeting, New York, N. Y., 1952.*
10	W	¶ *Institute of Radio Engineers-American Institute of Electrical Engineers begin joint electronic computers' conference, New York, N. Y., 1952.*
11	Th	¶ *New England Gas Association begins appliance servicing conference, Boston, Mass., 1952.*
12	F	¶ *Illinois Traffic Engineering Conference ends, University of Illinois, Urbana, Ill., 1952.*
13	Sa	¶ *National Association of Home Builders of the United States will hold meeting, Chicago, Ill., Jan. 18–22, 1953.*
14	S	¶ *Pipe Line Contractors Association will hold annual convention and exhibition, Houston, Tex., Jan. 19–21, 1953.*
15	M	¶ *Compressed Gas Association will hold annual convention, New York, N. Y., Jan. 26, 27, 1953.*
16	Tu	¶ *American Society of Heating and Ventilating Engineers will hold meeting, Chicago, Ill., Jan. 26–29, 1953.*
17	W	¶ *American Gas Association will hold home service workshop, Dallas, Tex., Feb. 2—4, 1953.*



Photograph by Harold M. Lambert

Thanksgiving 1952—in America, the Land of Plenty

Public Utilities
FORTNIGHTLY

Vol. L, No. 12 December 4, 1952

Do We Need More Federal Power Authorities?

Ever since President-elect Eisenhower stated that he believed in some kind of a compact arrangement for a partnership among Federal, local, and business interests in developing natural resources, speculation has been high as to just what the policy of the new administration might be in this respect. Some indication of what state officials were thinking about in the western regions may well be found in the following discussion of a state executive who is opposed to more Federal "authorities."

By the Honorable LEN JORDAN*
GOVERNOR OF IDAHO

I do not claim to be an expert on power. I own no stock in any power companies. I am not an attorney, nor an engineer. But I do submit at least the considered thinking of one country governor who has to deal with this specific problem.

Federal power authorities, in our current everyday thinking, and in the language commonly used by Federal agencies, are indistinguishable in practically every instance from Federal valley authorities. Those who are urging such new Federal agencies are inclined to mask their real desire to take over all the power supply in a given region under the guise of general regional development, and at the same time and by the same device, at-

*For additional personal note, see "Pages with the Editors."

This article is, in substance, the restatement of the views expressed by Governor Jordan before the Economic Club of Detroit, September 29, 1952.

tempt to increase their control of a river system beyond the narrow concept of power production.

Contrary to the belief held by many, the basic issue involved in determining whether we need Federal power authorities is not one of public *versus* private power. It is an issue which goes much deeper and further into the roots of our American way of life than any mere power controversy. It is basically the issue of whether or not the individual states, as we now know them, shall be superseded or even ignored and an overriding super state created over them; and whether Congress shall hand over to a Federal agency a large measure of the power to legislate and appropriate which is now vested in it.

I AM opposed to this radical departure from our present framework of government because I believe that all of the ends desired can be attained by intelligent, energetic, and imaginative use of the existing forms of government. Open and fair negotiations between the various states and between the states on the one hand and the Federal government on the other, carried out with all of the parties involved occupying positions of equal rank and authority can, in my opinion, achieve the aims desired.

No one can deny but that we have in this country a continuing problem of how best to develop our natural resources. It is a constant and ever-changing problem that has been with us from the beginning of our nation and one that will undoubtedly confront us for a long time to come.

It is particularly present in the West as a whole and acutely present in my own area, the Columbia river basin.

Typical of the problems presented in all river basins, we have there, perhaps in an exaggerated degree, the necessity of adjusting the rights in and to the waters of the Columbia river and its tributaries among the seven states drained by that great river system, and particularly the problem of understanding and protecting the rights of the four major states of Oregon, Washington, Montana, and my own state of Idaho. We have there the problems of providing for irrigation, industry, for flood control, for navigation, and for hydroelectric power, all with respect to a vast area, a tremendous quantity of water, and with unlimited potentialities. Similar problems are presented in varied degrees in all of the other great river basins.

IT might be well to define briefly this all-powerful agency which is being urged as the proper organism to do the job of planning for the development of and thereafter controlling and managing our natural resources. It has been defined (by Judge Clifford E. Stone) as:

> It is a Federal corporation, clothed with the power of government, possessed of flexibility of action, and empowered to control the enjoyment, utilization, and the development of natural resources of a region comprising the area of a major river basin and adjacent territory. It transcends state boundaries and rights. Congress retains no adequate controls over it; it is free of enforceable responsibilities to the states; and it eliminates entirely, or uses at its discretion, existing Federal departments now engaged in developing these resources.

When the first organization of this type, the Tennessee Valley Authority, was initially presented to Congress, one of its proponents, the late Secretary Ickes, was candid enough to state with respect to it as follows:

> There is before you a major step in the reorganization of the government of the United States as we have known it for the last 150 years.

This was certainly not an understatement. For, looking at the numerous valley authority bills that have been presented to recent sessions of Congress, there has been indicated a developing boldness on the part of the proponents of strong Federal power and bureaucracies to present a cunningly devised scheme to accumulate power and elude the authority of Congress.

AUTHORITIES are being urged by those who assert that they are tired of the slow, cumbersome, and tedious democratic processes and want to replace them with a new form of government which, they also assert, will be efficient, fast-acting, and free from the annoyances of legislative procedure in the legislative bodies of the states and in the Congress. They would by-pass Congress and create a new form of government intermediary between the states and the Congress if not completely overriding and superseding the sovereignty of the states.

THE basic premise of any authority which would accomplish the ends desired by these superplanners is one of dictatorial power. The only reason for urging an authority is the belief that our present state governments and Federal agencies do not have enough power.

The only excuse for an authority is that it will be an organization with more power and authority than now exists anywhere. Without such power, it would fail to accomplish its ends. To have such power is its fundamental purpose.

It must, of necessity, create some degree of planned economy. Otherwise, it could not work with the speed and efficacy claimed for it by its supporters, nor could it accomplish all the magical good ascribed to it.

In the last analysis, it is simply another bureaucratic agency of three, five, or seven men all appointed by the President for long terms, and subject to removal by him, and by him only, at his will. These men are to be given powers greater than now exercised by any Federal agency, powers of untrammeled action greater than those now asserted by Congress it-

¶ "WHENEVER *Federal authorities of any kind are created, it is apparent that the constitutional rights of the Federal government are being pushed to the utmost extent; in fact, there is a very grave constitutional question as to whether the Federal government has the right to engage in the business of production of hydroelectric power solely of and by itself.*"

self, and powers over the states and in violation of states' rights that have never before been given to or claimed by any men or group of men. The question then is, is it necessary to give such dictatorial powers to any agency?

Certainly, if we were to favor more Federal power authorities we must be convinced beyond a shadow of doubt that the authority method is the only practical and feasible method of handling our natural resources before we take the great and vital step of choosing that method. For it cannot be denied but that the authority of itself violates fundamental principles, at least in these respects:

(a) It interferes with the individual sovereignty of the states and ignores the protection of the rights reserved to the states by the Constitution.

(b) It substitutes the rule of men for the rule of law.

(c) It launches us into a program of planned economy and an advanced degree of state Socialism.

And in our western area, it will seriously affect our water rights—the very lifeblood of our entire western country.

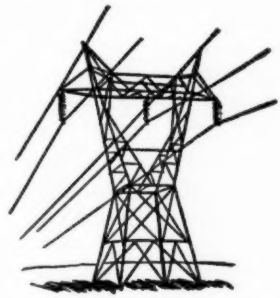
THE inherent danger to the rights of the individual states and their citizens to the waters of their streams which is inseparably connected with the advent of any Federal power agency cannot be exaggerated. We in the West, of course, appreciate this more vividly, and come into more direct contact with it, because of our utter and complete reliance on the waters of our streams for irrigation and other such uses. But the danger is not confined to western states in that it can be just as great with respect to industrial, domestic, and other uses in those nonarid states in the eastern part of our country.

With the great increase in population, the waters of our streams are going to become ever more precious and coveted. Throughout the land it is going to be more and more realized that it is very important for the individual states not to be hampered in the use of these waters. It seems inevitable that wherever a Federal agency appears on the scene it at once begins to assert so-called paramount and superior rights. Those people who have thought for many, many years that they had firm and well-established rights to the use of water suddenly find their claims challenged by a branch of the Federal government.

The most outstanding case, of course, is the Fallbrook Case in California. There we find the Navy Department, acting through the Department of Justice, haling 14,000 citizens into court, through subpoenas served by Marines in uniform, to answer the asserted paramount right of this Federal agency to the waters of the Santa Margarita river. All of us conversant with the situation, seeing such examples, are not content to sit back and say, "It can't happen here" and allow Federal agencies of unlimited power to move in upon other streams.

WHENEVER Federal authorities of any kind are created, it is apparent that the constitutional rights of the Federal government are being pushed to the utmost extent; in fact, there is a very grave constitutional question as to whether the Federal government has the right to engage

DO WE NEED MORE FEDERAL POWER AUTHORITIES?



On Authoritarian Substitutes

"THE *creation of valley authorities or power authorities is a substitution of arbitrary power for democratic processes; is a partial abdication by Congress; and results necessarily in the creation of a superstate of some degree. The challenge to state sovereignty, and the multiplication of Federal control inherently involved in such a scheme, is contrary to all our past ideas with reference to the framework of our government.*"

in the business of production of hydroelectric power solely of and by itself.

But in any event, the attempt to do this in violation of the rights of the states in and to the waters of their streams, is a very apparent trespass upon the states' fundamental rights.

WE had a recent example of this in my own state. The attempt was made at the last session of Congress to authorize the construction by the Bureau of Reclamation of the Hell's Canyon dam, a great structure on the Snake river, the cost of which would be upwards of three-quarters of a billion dollars, or perhaps more. It is almost a pure power project, although attempted to be disguised with some rather imaginary flood-control and navigation benefits.

At the hearing, before the subcommittee of the Committee on Interior and Insular Affairs of the House of Representatives, the matter was presented in all of its details by a multitude of Federal employees. They brought out their first team, ranging all the way from the Secretary of the Interior and the Commissioner of the Bureau of Reclamation down through a multitude of experts, all urging the Federal construction of this dam. But the severe questioning of these government people by Congressmen Clair Engle of California, chairman of the subcommittee and an authority on water law, by Congressman Hamer Budge of my own state, and other members of the subcommittee, brought out the unquestionable fact that this Federal power project would,

of necessity, violate the rights of the states which were the real owners of the waters of this great stream. In compliment to these members of Congress, it must be mentioned that at the close of the hearing all members of the subcommittee, both Democrats and Republicans, voted unanimously to table consideration of this project because of this admitted violation of state water rights.

This one project is an illustration of the situation that will be presented wherever and whenever an empire-building Federal power authority is sought to be created on any stream system.

IN my opinion, there is one very feasible and entirely democratic way to accomplish any of the real good that may be claimed for Federal authorities, and that is by the method of compacts between states. This is a very wholesome process for dividing interstate water uses equitably and fairly among all of the states interested in any given river system.

When the states, represented by persons of their own choosing who have intimate acquaintance with all of the specific problems involved, sit down around a table, we have a procedure which meets all of the tests of democracy. It meets the test of providing a co-ordinated plan which will control and use the water to the best advantage of the whole basin. And it meets the test of providing that the direction and type of development shall be in accord with the wishes of the people of the basin itself, and not merely in accord with the theory of outsiders or central planners in Washington.

If necessary, the interstate compact can provide not only for the method of apportioning the rights to use the waters of a given stream system among the states involved, but it can go further and provide for a continuing commission, composed of representatives of all of the states, to plan and control the use and future development of that water. Such a commission is effectively functioning on the Upper Colorado river at this time.

Perhaps such a commission, created and authorized by interstate compacts, could go even further and raise the necessary money for resource development in the bond market. Certainly, this would test the pay-out feasibility of any project planned.

But before resorting to this procedure and after the co-ordinated planning has been accomplished by the compact method, then, I believe that first opportunity should always be given for the development of hydroelectric power and other water uses by private enterprise. So long as these developments are in accord with the co-ordinated plan, all claims of abuse or unfair use by private enterprise are at once eliminated.

LIKEWISE, wherever any good is accomplished for the nation as a whole, such as flood control or navigation, in the construction of projects by private enterprise, then financial contributions should be made from public funds to cover these general benefits just the same as is done in the case of construction by Federal agencies. This contribution from the general treasury, for the cost of flood-control or navigation benefits, is one of the pet schemes used by govern-

ment planners to say that a given project can be built by a public body but is not feasible to be built by a private concern.

In fact, an unfair allocation of costs to navigation and flood control is one of the favorite devices used by Federal agencies to make the cost of public power appear low. But in any event, whatever the benefit to the public good amounts to, there is no sound reason why the same contribution should not be made out of the Federal Treasury if the project is built by private capital as would be made if it were built by a Federal agency.

If the development of the river system is handled in this manner, the way will still be open for existing Federal agencies to construct any projects which, for any reason, cannot be properly constructed by private enterprise or by interstate compact commissions. But certainly there is no need to create new Federal agencies to construct such projects, if any, so long as we have the highly competent United States Army Corps of Engineers and also the Bureau of Reclamation already in the picture.

But I do believe that our statutes should be changed and strengthened to provide that whenever the Federal government is repaid that portion of the cost of any project which is properly reimbursable, that then the title to such project should pass either to those water users who have paid its cost, or to the states in which the project is located, as may be proper.

It is the present contention of Federal agencies that all such public projects shall remain under the control and management of the Federal government forever. This, to my mind, is creating an intolerable situation wherein the Federal government is gradually and surely encroaching upon the rights of the states and trespassing upon all manner of private business.

Bringing these authorities down to the specific subject of the production of power, we should first note that this is actually always the real and most important aim. Those whom we collectively call "bureaucrats" seem imbued with the overwhelming desire to control the electric power production of the nation. Perhaps they are influenced by the thought which has been expressed by some that if you can control the power supply, you can control the whole industrial pattern of that area.

We have seen evidences of the

¶ "If *Federal power is cheap power because it is freed from paying taxes, then any product for sale in the market today can be made 'cheaper' by freeing the producer thereof from paying taxes. Accordingly, when the question is asked whether or not any area wants 'cheaper power' by having a Federal power authority, these are simply other words for asking whether or not it is desired to eliminate that industry from the burden of paying taxes.*"

practicability of this in the Pacific Northwest.

There, in the region controlled by the Bonneville Power Administration, and in a region with the greatest potential hydroelectric development in the whole nation, there is, and has been for some time, a power shortage. And there is every evidence that this Federal agency intends to maintain such a power shortage by the same expedient that it has used in the past; namely, to arbitrarily move into the area industries consuming large quantities of power such as aluminum pot lines. So long as a shortage is maintained, those in control of the agency can continually cry that a crisis exists and seek more and more millions of appropriations. And so long as those with great governmental authority can arbitrarily locate industries, these shortages can be continued.

From observing the happenings in this same region, there is every reason to believe that if we admit a Federal power authority into any given area it means the end of private power development in that area. The Federal agency is able to pre-empt public lands, the flow of streams, and to combat the issuances of licenses to private companies to such an extent that capital is not available for further private investment and we inevitably find private development at a standstill. By reason of the preference given public bodies in the purchase of power from Federal authorities, and by other artificial means, it is very easy, once public power has opened the door, for it to completely eliminate private power companies.

In the West, we are confronted with the elimination of a substantial part of our future taxable wealth whenever a Federal power authority moves in. We have great potential power sites. If these power sites are developed by private companies, all taxing bodies benefit, from the Federal government down through the state government, and clear on through to the lower taxing bodies such as school districts and highway districts. If a Federal authority develops these same power sites, not only are the Federal taxpayers penalized in the first instance by being taxed for the funds to construct the project, but they are continually penalized by the subsequent loss of all Federal income taxes and other Federal levies. There is not the natural development of the tax base in the state, and the state in turn loses both income tax and a large valuation which would otherwise be subject to ad valorem taxes. And, in turn, the smaller taxing units are unable to tax the Federal installations which have been constructed.

While some lip service is given to this theory by stating that the Federal authorities make payments in lieu of taxes, any such payments which have come to my attention, are vastly less than the amount of taxes that would have been paid if the same development had been made by private power companies.

Spokesmen for public power claim that it is necessary to have Federal power authorities to furnish some sort of yardstick with which to compare the rates charged by private companies, even though privately owned utility companies come under strict rate regulation. Many years have

passed since the first Federal power plants were operated and I do not believe it is now contended by anyone of sound judgment that any Federal agency ever has or ever will build its dams and power plants any more cheaply than do private companies. Nor is it contended that in actual operation the Federal authorities are any more efficient nor that they produce power at less cost than do private companies. On the other hand, all available figures seem to indicate that both original cost and actual operating cost in public installations are higher than in private installations.

In the last analysis, the Federal agencies are able to sell power cheaper than private agencies only and solely because they are free from taxation. The question, then, is this: Is any product which is sold at a lesser price a cheaper product if the maker is freed from the tax liability?

If Federal power is cheap power because it is freed from paying taxes, then any product for sale in the market today can be made "cheaper" by freeing the producer thereof from paying taxes.

Accordingly, when the question is asked whether or not any area wants "cheaper power" by having a Federal power authority, these are simply other words for asking whether or not it is desired to eliminate that industry from the burden of paying taxes.

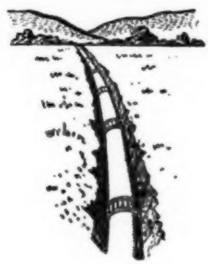
An interesting proposal is made by Charles E. Wilson, former Defense Mobilizer, to denationalize the government's huge investment in the electric power industry and other enterprises. He would sell these investments to owners of government bonds on an exchange basis of bonds for stock in the new companies. He claims a twofold advantage of Federal debt reduction, and of returning these operations to a tax-paying instead of a tax-free basis. I recommend that you read, if you have not already done so, a full account of Mr. Wilson's plan as reported in the September 26th issue of the *U. S. News and World Report.* There is plenty of food for thought and much to commend here.

I have deliberately refrained from any extensive use of the word "socialism" or "socialistic" in my discussion of these authorities, but certainly no one can deny but that the creation of any such valley authority, or even a specific power authority, is a step in that direction.

The creation of valley authorities or power authorities is a substitution of arbitrary power for democratic processes; is a partial abdication by Congress; and results necessarily in the creation of a superstate of some degree. The challenge to state sovereignty, and the multiplication of Federal control inherently involved in such a scheme, is contrary to all our past ideas with reference to the framework of our government.

I cannot conceive that there is, any place in the United States, any such desperate need for the construction of power projects that it requires the surrender of even part of our freedom to get these projects.

And, in my opinion, any power which results from any such surrender of a part of our freedoms, is decidedly not "cheap power."



Automatic Adjustment Clauses In Gas Rate Schedules

PART I

In the "Financial News and Comment" department of the April 24th issue of Public Utilities Fortnightly *(page 569), there appears the suggestion that "Natural Gas Retailers Need Rate Adjustment Clauses" in their rate schedules. It is then pointed out that, because of the delays incident to Federal and state regulatory processes, natural gas distributors may frequently be forced to pay higher prices to the pipeline suppliers pending final determination of the proper level of the pipeline companies' rates as well as their own. This apparently means a cost-of-gas escalator clause. But the situation, if oversimplified, may, in fact, give rise to some confusion. The table which was part of the article (page 570), was based on data in the 1951 report of the rate committee of the American Gas Association, and includes all types of adjustment clauses, rather than just those based on the cost of gas alone. The present study was undertaken as a further analysis of the whole problem.*

By EDWIN FLEISCHMANN*

Types of Rate Adjustment Clauses

Automatic rate adjustment provisions have been included in utility rate schedules for many years. The objective of such clauses is to compensate the utility for rises in some or all of its costs of doing business, as well as to give the customers the benefit of declining costs in the same areas. In general, the rates are stated on the basis of certain costs under specified base conditions, and the range and rate of variation of the rates are stated in terms of increments or decrements related to the base prices. Among the most usual costs which give rise to escalation in gas rates are the following:

1. Heating value of the gas
2. Taxes
3. Fuel cost in manufactured gas operations
4. Cost of natural gas
5. The price of competitive fuel
6. U. S. Department of Labor Wholesale Commodity Price Index
7. All operating and maintenance expenses

It is important to distinguish between those types of costs which re-

*For personal note, see "Pages with the Editors."

TABLE I[1]

	1949	1950	1951
Natural Gas:			
Total Number of Utilities	525	540	589
Number of Utilities with Tax Clauses in One or More Schedules	22	21	25
Per Cent of Total Number	4.19%	3.89%	4.24%
Manufactured, Mixed, or LP-gas:			
Total Number of Utilities	388	372	341
Number of Utilities with Tax Clauses in One or More Schedules	11	12	13
Per Cent of Total Number	2.84%	3.23%	3.81%
All Gas Utilities			
Total Number of Utilities	913	912	930
Number of Utilities with Tax Clauses	33	33	38
Per Cent of Total Number	3.61%	3.62%	4.09%

[1]Data from annual reports of the subcommittee on rate adjustment clauses of the rate committee of the American Gas Association for the years shown.

late peculiarly to natural gas utilities, as contrasted with others which are applicable either primarily to manufactured gas operations or generally to all utilities. In the detailed discussion below, an effort will be made to point out these differences.

1. *Heating Value of the Gas*

EXCEPT where the source of gas is such that the product sold has a constant BTU content, it is usual to include in the rate schedules a clause which changes the rate charges roughly in proportion to the BTU content of the gas. There are some variations in these clauses due to special conditions surrounding the supply or service situation in various parts of the country. In general, however, regulatory bodies have not objected to this type of adjustment provision. They have, in fact, insisted upon it in fairness to both the company and the customer.[2]

Such automatic change in the rate pricing is particularly important in several special situations:

(a) Where natural gas is obtained from fields having different BTU content.

(b) Where mixed gas is supplied, and the heat content may be varied from time to time.

(c) During the transition period when a manufactured or mixed gas operation is being changed over to natural gas.

While it is true that manufactured gas utilities can more readily control the heating value of the gas sold than can some natural or even mixed gas companies, the BTU adjustment clause presents no very unique problems. It can be easily included, if needed, and may be quite simply phrased.

2. *Taxes*

FROM the beginning of the present high-tax era, all types of utilities have endeavored to protect their net

[2]See *Re* Pacific Gas & E. Co. (1949) 49 Cal PUC 107 at page 130, 82 PUR NS 473. The commission set the percentage adjustments for heating value of the natural gas at a level somewhat different from that proposed by the company. This method was reaffirmed in a subsequent rate case relating to the same company, reported in 51 Cal PUC 131 at page 143, 93 PUR NS 405. See also *Re* Coast Counties Gas & E. Co. (1951) 50 Cal PUC 781, at page 788.

income after taxes from the adverse effects of the long arm of the tax gatherer. The problem is, of course, not unique for natural gas utilities. The actual results, however, indicate that not too many gas utilities have instituted tax clauses. Table I (page 827) shows how the number of companies having tax clauses has changed over the past three years.

It may be assumed that the slight over-all increase in number of utilities with tax clauses in the most recent (1951) report was brought about largely by the steeply rising tax load of the past few years.

TAX clauses are of two types. The majority of them are mandatory and require the utility to adjust the rates in accordance with the stated formula. A few companies (14 of the 1949 total above, 10 in 1950, and 9 in 1951) have permissive provisions

TABLE II
NUMBER OF MANUFACTURED, MIXED, AND LP-GAS DISTRIBUTING UTILITIES WITH FUEL-COST ESCALATOR CLAUSES IN RATE SCHEDULES

	Data Given in AGA Rate Committee Report for: 1949	1950	1951	*AGA Rate Book-Latest Revisions To 9/15/52*
California	3	4	4	1
Connecticut	8	11	11	11
Delaware	1	1	1	1
Florida	3	6	6	7
Georgia		1	1	1
Idaho		1	1	1
Illinois	4	4	4	4
Iowa		3	3	2
Maine		2	2	
Maryland	2	2	1	1
Massachusetts	40	40	38	14
Michigan	4	5	4	4
Minnesota	2	2	2	2
Nebraska		1	1	1
New Hampshire	5	5	5	4
New Jersey	10	8	7	4
New York	3	2	2	2
North Carolina	3	5	5	5
North Dakota	1	1	1	1
Oregon	3	3	4	3
Pennsylvania	9	8	6	5
Rhode Island	3	3	3	4
South Carolina	2	4	3	3
South Dakota		1		
Tennessee	2	2	2	2
Vermont	2	3	3	4
Virginia	4	4	3	1
Washington	2	2	1	1
West Virginia	1	1	1	1
Wisconsin	4	4	3	3
Total	121	139	128	93
Total Number of Utilities Supplying Manufactured, Mixed, or LP-gas	388	372	341	286
Percentage of Total Number with Fuel-cost Escalators	29.90%	35.48%	35.78%	31.47%

Note: Totals have been adjusted to eliminate duplicated figures resulting where one utility serves in more than one state.

which allow, but do not require, the company to increase its rates with tax changes.

In general it seems preferable, if a rate adjustment clause is to be adopted, to use one which is mandatory. This avoids possible discrimination between classes of customers, as well as between customers in the same class who may take service at different times.

The application of tax increments to various classes of service should not be done on a straight MCF basis, since many taxes are allocated, at least in part, to the demand component as determined in cost studies. Considerable injustice may, therefore, result unless the apportionment of the tax addition is made with due regard to the responsibility of each class for the demand component, as well as to the MCF sold to the class.

Furthermore, taxes may vary between communities. Where utilities have zone rates, it would be manifestly unfair to apply to the whole system a tax escalation caused by increases imposed for revenue-raising purposes by taxing authorities in only one area.[8]

3. Fuel Cost in Manufactured Gas Operations

ONE of the principal costs of operation of manufactured gas utilities, and often of mixed gas companies as well, is the fuel used for making the gas and for its enrichment. In line with the rise in fuel prices over the past thirty years, a substantial proportion of utilities supplying these services have incorporated fuel-cost escalator clauses in their rate schedules. The number of utilities with these in effect has been reported upon each year by the subcommittee on rate adjustment clauses in the annual report of the rate committee of the American Gas Association. Table II (page 828) shows the trend of these statistics over the past three years, together with the number of utilities with such clauses at the present time. The latter data were obtained from an examination of the American Gas Association rate service and all revisions to and including that of September 15, 1952.

While the number of utilities furnishing manufactured, mixed, or LP-gas service has been declining, almost one-third of the total still use escalator clauses to protect themselves against skyrocketing fuel costs.

THE phraseology of fuel-cost clauses usually provides that changes in cost of coal or oil for gas and of oil for enrichment, often minus the revenue from by-products, shall be reflected in the rates and spread over all of the MCF sold. This is quite prop-

[8] Commissions have recognized this principle in making rates. See *Re* Idaho Power Co. (Ida) PUR1920C 949; *Re* Southern California Gas Co. (Cal) PUR1922A 277.

In a recent case, the Utah commission observed that "it is better public policy to have the citizens and ratepayers conscious of all taxes being levied by the local municipalities." It, therefore, disallowed certain local franchise taxes for rate-making purposes and ordered the company to "state on customer's bill and collect as a separate item on a pro rata basis from its customers in any municipality wherein is imposed any municipal franchise, occupation, sales, or license tax." *Re* Utah Power & Light Co. (Utah) Case No. 3780, decided July 29, 1952.

The same method was prescribed in two earlier Utah decisions this year: *Re* Mountain Fuel Supply Co. 94 PUR NS 88; *Re* Mountain States Teleph. & Teleg. Co. (Utah 1952) 94 PUR NS 105.

TABLE III
NUMBER OF NATURAL GAS DISTRIBUTING UTILITIES HAVING COST-OF-GAS ESCALATOR CLAUSES IN RATE SCHEDULES

	Data Given in AGA Rate Committee Report for:			*AGA Rate Book-Latest Revisions*
	1949	*1950*	*1951*	*To 9/15/52*
Arizona				1
Georgia		1	1	1
Illinois	2	3	4	2
Indiana		1	2	2
Iowa	1		2	2
Kentucky			1	1
Louisiana			1	2
Michigan	1			1
Minnesota		1	1	1
Mississippi			1	1
Nebraska			1	1
New Hampshire				1
New Jersey			1	1
Ohio				2
Oklahoma			1	1
Pennsylvania				1
South Dakota				1
Texas				1
Wisconsin	3	1	1	
Total	3	7	17	21
Total Number of Natural Gas Utilities	525	540	589	640
Percentage of Total Number with Cost-of-gas Escalators	0.57%	1.30%	2.89%	3.28%

Note: Totals have been adjusted to eliminate duplicated figures resulting where one utility serves in more than one state.

er, since fuel is entirely a commodity cost and should affect all sales alike.

Needless to say, the foregoing does not relate to natural gas utilities which operate stand-by manufacturing plants during the system peak, since they do not sell manufactured gas as such. Their costs of manufactured gas relate wholly to system peak demand.

4. Cost of Natural Gas

THERE has been some reluctance among natural gas companies, particularly in areas such as California, where gas is purchased both from field suppliers and from pipeline companies, to adopt cost-of-gas escalators in their retail rates. They fear that the presence of such an escalator

would limit the distributor's effectiveness in bargaining with his supplier for lower rates in the purchase contract. This might be especially true in connection with field purchases which are not subject to regulation.

TABLE III shows that, in the AGA subcommittee report for the past three years, the number of cost-of-gas escalator clauses among natural gas distributors has been growing, especially among utilities which purchased gas wholly from pipeline suppliers regulated by the Federal Power Commission. The problem of bargaining with unregulated field producers thus does not arise for the distributor.[4] The largest increase in number of these clauses appeared in the subcommittee report in 1951 which contains data on rates in effect on December 31, 1950. It was apparently brought about by the many pipeline rate increase applications at about that time. The right-hand column of the table gives the result of a recent survey of the American Gas Association *Rate Book* with the revisions thereof to September 15, 1952.

There has been a slight increase in the number of cost-of-gas escalators in natural gas rate schedules during the past year and a half.

[4] Southwest Gas Corporation Ltd., a small utility serving in the Barstow-Victorville area of California, recently proposed an interruptible natural gas schedule with an escalator clause based on the cost of gas purchased from Pacific Gas and Electric Company's line bringing gas into the state from Texas. This is the first time a cost-of-gas escalator clause has been proposed by a natural gas utility in the state. The commission's Decision No. 47780 dated October 1, 1952 (Case No. 5399), approving the schedule, stated that the escalator clause "will be included only because of the unique situation existing as to this particular schedule and it is not to be considered as a precedent for other cases."

PART II *of this article will appear in the next issue of the* FORTNIGHTLY.

"FOR many years governmental attempts to encourage the campaign for higher wages rested mainly on humanitarian grounds. About twenty years ago another argument for wage increases gained wide acceptance; namely, that high wages are economically desirable because they increase the purchasing power of workers, provide a larger market for goods and services, and thus stimulate production and employment. This argument, in its more naïve form, ignores the fact that employers' profits, stockholders' dividends, and other distributive shares also constitute purchasing power. In a more sophisticated form, it holds that these other types of purchasing power are less readily translated into effective demand than are wage payments. In either form it stresses the importance of wages as a source of buying power and belittles their meaning as a cost of production."

—EXCERPT *from "The Guaranty Survey."*

Fair Return for Natural Gas Companies

In an earlier article, Dr. Badger discussed the impact of the Northern Natural Gas Case and allied decisions of the Federal Power Commission on natural gas company financing. In this, the concluding instalment, he goes into the question of determining the fair rate of return required for natural gas companies. He urges substitute measures for any attempt to gauge the cost of common stock capital in a growing industry by "spot" earnings-price ratios.

BY RALPH E. BADGER*

IN an earlier article appearing in this publication, the impact of certain recent decisions of the Federal Power Commission on the natural gas industry was discussed.[1] It was also indicated that an attempt to measure the cost of common stock capital in a growth industry by current or "spot" earnings-price ratios must be subject to wide error.

Certain substitute methods will now be developed for measuring the return required by typical natural gas companies, both pipeline companies and retail distribution companies, in order to (1) maintain their credit, (2) enable them to secure additional capital as required, appropriately divided between fixed-charge and common stock capital, (3) provide a return to the common stockholders commensurate with returns on investments in other enterprises having similar risks.

The natural gas industry is subject

*For personal note, see "Pages with the Editors," November 20, 1952, issue.

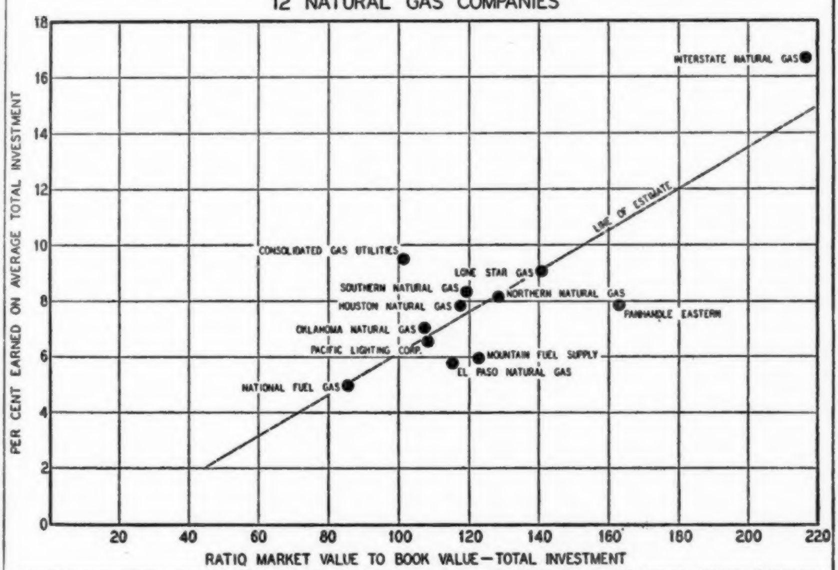
[1] Reference is here made specifically to Opinion No. 228, "In the Matter of Northern Natural Gas Company," Docket Nos. G-1382, G-1533, G-1607, June 10, 1952 (95 PUR NS 289). Shortly thereafter, Opinion 235, "In the Matter of Colorado Interstate Gas Company," Docket No. G-115 (95 PUR NS 97), was issued. In substance, this opinion, as far as it discussed rate of return, closely followed Opinion 228. Thus, on page 41 of Opinion 235, appears the statement: "A rate of return of 5¾ per cent on the rate base which we have here used would provide a return for the common stock equity of Colorado of 8.45 per cent† after the servicing of its debt and preferred stock requirements and after allowance for all income taxes. Such return for equity capital is, we believe, wholly adequate in the light of the record in this case. We therefore conclude and find that, based on the record in this proceeding, a rate of return of 5¾ per cent is fair, reasonable, and adequate . . ."

†After allowance for cost of financing of one-half per cent.

to greater hazards than those found in the electric utility industry. Natural gas is an exhaustible natural resource, and the annual rate of natural gas production is increasing rapidly. There exists an important risk, due to the possible exhaustion of reserves within a comparatively short period. Even though depletion allowances in a natural gas industry are provided to return a part of the investment by the time gas reserves are exhausted, stockholders, particularly in a natural gas pipeline operation, suffer two types of exposure: (1) The retirement of debt by depletion throw-off is accompanied by a corresponding reduction in the book value of net plant, thus reducing both the rate base and the rate of return to the stockholder; and (2) in an effort to maintain service at an adequate level, management may, in fact probably will in time to come, make future investment with depletion throw-off, which investment will involve higher unit costs than was the case with original investment, as gas reserves become less dependable and harder to find, or more costly to exploit.

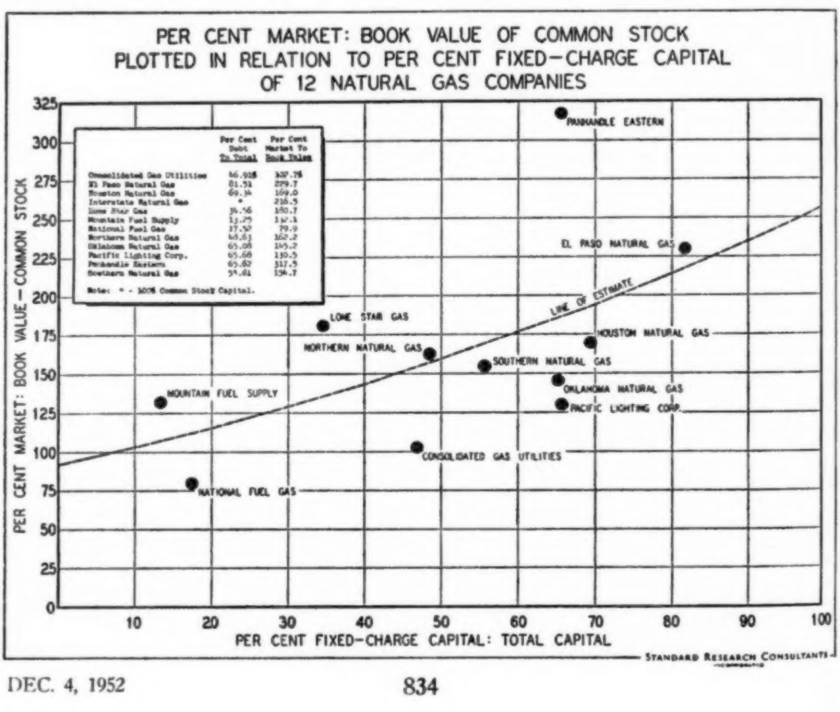
In addition, natural gas is in direct competition with other fuels. Unlike the electric industry, there is at least one substitute for natural gas in respect to nearly every use to which it may be put. One may expect, therefore, that return requirements, expressed as a percentage of rate base, will be higher for the natural gas industry than for the electric utility industry.

PER CENT EARNED ON OVER-ALL CAPITAL, 1950–1951
PLOTTED IN RELATION TO RATIO MARKET TO BOOK VALUE TOTAL INVESTMENT
12 NATURAL GAS COMPANIES



Two somewhat different approaches to over-all rate of return will be developed. Before specific treatment is undertaken, however, it is necessary to establish the point that over-all fair rate of return should not differ between two companies alike in all respects except that of capital structure. Although a standard or acceptable capital structure for a natural gas company may be one consisting of about 50 per cent of fixed-charge capital and 50 per cent of common stock capital, there appears no valid reason why "fair rate of return" should vary for two companies differing only in respect to capital structure, because one company has 50 per cent in fixed-charge capital, whereas the other company may have 75 per cent in fixed-charge capital and 25 per cent in common stock capital. The fair rate of return allowed to a utility is the amount necessary to meet operating expenses, including depreciation and taxes, and to meet capital costs, including an allowance for risks assumed. If one company, due to the inherent nature of its operations, is subject to greater risk than another, then some variation in return should be made in "fair rate of return" to compensate for such greater risks.

VARIATION in capital structure does not, *per se,* change the aggregate amount of enterprise risk in any way, shape, or manner. Variation in capital structure is a device for distributing these existing over-all risks of the enterprise in accordance with the tastes and requirements of the several in-



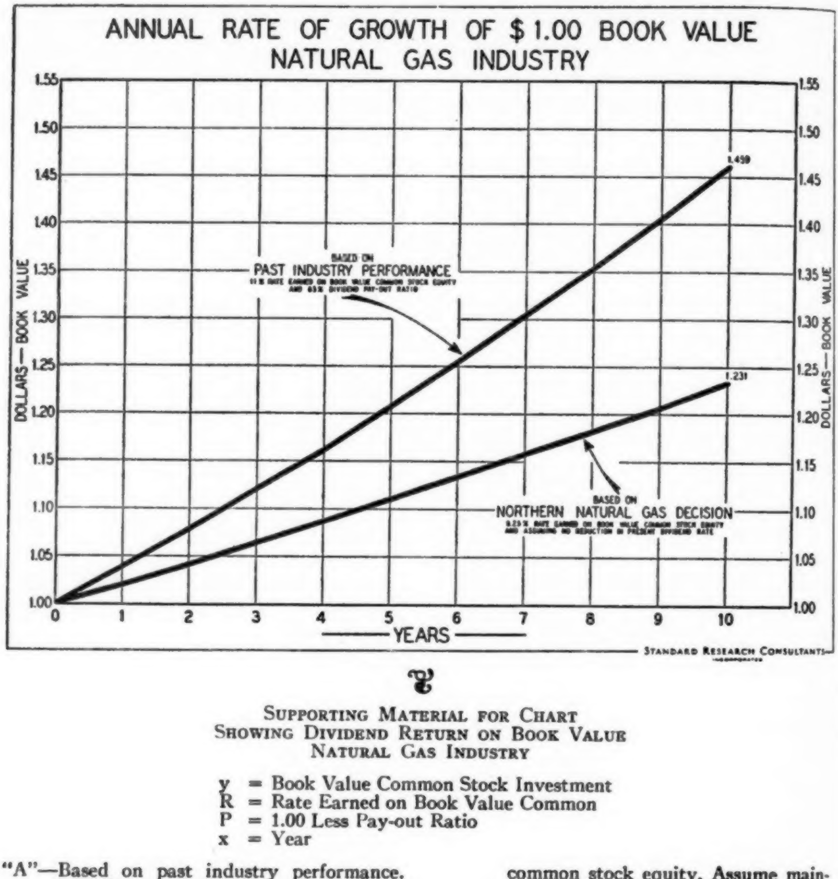
vestors therein, but does not affect the amount of over-all risks of the enterprise. Bonds are created for the purpose of apportioning a certain percentage of the investment to institutional investors, or to individuals who are willing to trade risk for a low return. And, conversely, from the stockholders' point of view, they have been willing to bear more risk in return for the lower return paid to the bondholder, in the hope of increasing their return as a reward for the additional risk assumed.

The preferred stockholder is in much the same position as is the bondholder, except that he is willing to take more risk than the bondholder in consideration of a higher rate of return, although unwilling to assume all of the risks associated with common stock.

Now, the extent to which the common stockholder wishes to increase his risk, as well as to increase his possibility of getting a higher return, will vary as between common stockholders. It is axiomatic that the larger the amount of fixed-charge securities preceding the common, the higher the risk attached to the common, and, properly, the greater the chance of gain or loss to the common stockholder. The process of issuing bonds and preferred stock is called "trading on the equity." It implies the distribution of risk, not the creation of risk. The stockholder of a company with a high percentage of fixed-charge capital in its structure expects a higher return for the greater risk he assumes. This higher return must be in the form of a higher percentage rate of earnings on the book value of common stock.

Obviously, if the over-all return is the same for two companies with varying capital structures, the capital costs of both companies are at the same rate, and the ratepayer's position is unchanged except for the impact of taxes. Even though the common stockholder of the high leverage company gets a relatively high return on the book value of his investment, the charge against the ratepayer is not increased; in fact, it is decreased. This can be demonstrated by a simple example: Let us assume a company with 80 per cent debt and with 20 per cent common stock. Let us apply a 4 per cent cost rate to the debt and 18 per cent to the common. The over-all cost rate becomes 6.80 per cent. Let us assume another company with 50 per cent in debt, and 50 per cent in common stock. Debt costs may be assumed at 3.50 per cent, giving annual requirements per $100 of capital of $1.75. Common capital costs may be assumed at 10 per cent, giving requirements of $5 per $100 of capital, or total requirements of 6.75 per cent.

The over-all earnings requirements of these two companies are thus practically identical. The ratepayer is required to produce practically the same amount of gross income after taxes in both cases. As a matter of fact, however, the ratepayer of the 80 per cent debt company is required to produce less income before taxes than in the second case. In the case of the company with 20 per cent common stock capital, the dollar requirement per $100 of capital subject to income taxes is in the amount of $3.60, which requires $7.50 before taxes. This makes total requirements before taxes to be $10.70 per $100 of capital. In the case



SUPPORTING MATERIAL FOR CHART
SHOWING DIVIDEND RETURN ON BOOK VALUE
NATURAL GAS INDUSTRY

y = Book Value Common Stock Investment
R = Rate Earned on Book Value Common
P = 1.00 Less Pay-out Ratio
x = Year

"A"—Based on past industry performance. (11% rate earned on book value common stock equity. 65% dividend payout ratio).

Formula $y = (1 + R \cdot P_o)^x$

$x =$	$y =$
1	1.0385
2	1.0785
3	1.1200
4	1.1631
5	1.2079
6	1.2544
7	1.3027
8	1.3529
9	1.4049
10	1.4590

"B"—Based on Northern Natural Gas decision. (9.25% rate earned on book value common stock equity. Assume maintenance present cash dividends.)

Formula $y = (1 + R \cdot P_o)^x$

$x =$	$y =$
1	1.0210 (1)
2	1.0424
3	1.0643
4	1.0867
5	1.1095
6	1.1328
7	1.1566
8	1.1809
9	1.2057
10	1.2310

(1) If cash dividend under "A" of .0715¢ per \$1.00 is maintained, pay-out ratio becomes $\frac{7.15}{9.25} = .77297$

$1 + (.0925 \times .227) = 1.0210.$

of the company with 50 per cent common stock capital, earnings requirements after taxes on the common stock segment are at the rate of $5 per $100. This requires $10.42 before taxes, making over-all requirements before taxes $12.17. The difference between $10.70 and $12.17, or $1.47 per $100, represents a saving to the ratepayer in the case of the 80 per cent debt company.

If resort is made to the more customary method of determining cost of capital by applying specific cost rates to the various components of capital structure, the results are incongruous. The company with the structure heavily impregnated with debt comes out with the lower capital cost, and, under prevailing regulatory practice with some commissions, will receive the lower allowable return. If, now, there is any variation in risk by virtue of varying capital structure, the company with the more debt would have the greater risk and should get the higher return, not the lower.

Wherein lies the error? The error lies in failing to recognize that the earnings-price ratio is predicated on market price, which is a function of both current and *future* earnings. Investors may be willing temporarily to overprice a leverage stock in the hope of receiving higher future earnings from leverage. If, however, earnings on book investment are restricted to the rate allowed a low leverage company, this process of overpricing may be expected to disappear.

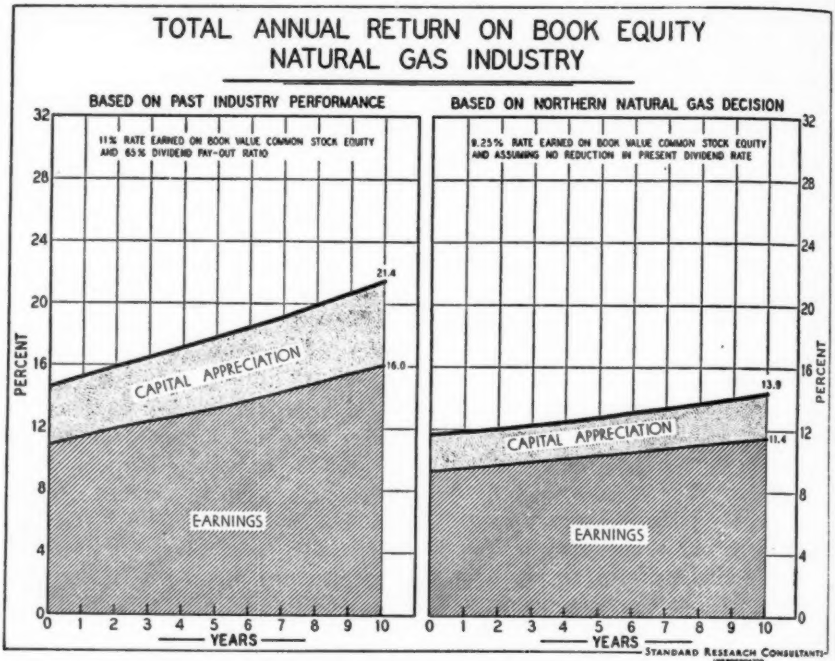
Approach I—Determination Over-all Earnings Requirements—Natural Gas Companies — Based on Sustaining Market Value Total Investment at 115 Per Cent of Book Value

The first approach to the determination of over-all requirements for natural gas companies is based on a determination of the rate of earnings necessary to maintain market value of over-all investment at 115 per cent of its book value.

If earnings are provided on an over-all basis adequate to support the market value of total investment at 115 per cent of book value, then the market value of the common stock of a company with 50 per cent in debt and 50 per cent in common stock would sell at 130 per cent of market value, since, with proper earnings, fixed-charge capital will have a market value close to par. There may be some difference of opinion as to how much of a margin, or buffer, should be provided for in respect to the market to book relationship for natural gas company common stocks. The 30 per cent relationship here suggested is considerably below that which has been established historically by the market for natural gas company stocks, as will be shown.

This buffer of 30 per cent must provide for three items: (1) the underwriting and corporate costs of selling additional stock, (2) market pressure which develops at the time sizable amounts of additional common stock is sold, and (3) normal fluctuations in market prices.

If an over-all ratio between market value of total investment and book value is maintained at 115 per cent, it is obvious that a variation in capital structure from the suggested *standard* structure will cause a variation in the



Supporting Material for Charts
Showing Total Return on \$1.00 Book Value Common Stock
Natural Gas Industry

Formula $$y = (1 + R\cdot P_o)^x R + (1 + R\cdot P_o)^x - (1 + R\cdot P_o)^{(x-1)}$$

"A"—Based on past industry performance.

$x =$	$(1 + R\cdot P_o)^x R$		$(1 + R\cdot P_o)^x - (1 + R\cdot P_o)^{(x-1)}$	$y =$
1	1.0385(.11) =	.114	.0385	.1525
2	1.0785	.119	.0400	.1590
3	1.1200	.123	.0415	.1645
4	1.1631	.128	.0431	.1711
5	1.2079	.133	.0448	.1778
6	1.2544	.138	.0465	.1845
7	1.3027	.143	.0483	.1913
8	1.3529	.149	.0502	.1992
9	1.4049	.155	.0520	.2070
10	1.4590	.160	.0541	.2141

"B"—Based on Northern Gas decision.

$x =$	$(1 + R\cdot P_o)^x R$		$(1 + R\cdot P_o)^x - (1 + R\cdot P_o)^{(x-1)}$	$y =$
1	1.0210(.0925) =	.094	.0210	.115
2	1.0424	.096	.0214	.117
3	1.0643	.098	.0219	.120
4	1.0867	.101	.0224	.123
5	1.1095	.103	.0228	.126
6	1.1328	.105	.0233	.128
7	1.1566	.107	.0238	.131
8	1.1809	.109	.0243	.133
9	1.2057	.112	.0248	.137
10	1.2310	.114	.0253	.139

per cent relationship between market and book value of the common stock component, even though the over-all market value of total investment remains at 115 per cent of book value. Thus, a company with 80 per cent of total capital in the form of fixed-charge capital, would find its common stock selling at 175 per cent[2] of book value, if over-all investment had a value equal to 115 per cent of market value. Conversely, if less than 50 per cent of total investment is in the form of fixed-charge capital, the relationship of market to book value for common will decline below 130 per cent.

THESE varying relationships need cause no concern. In the first place, the market to book value relationships will vary with the relative risks assumed by the common stockholders. Stockholders in the 80 per cent debt company are entitled to a better relationship on account of risk, and, in fact, require a larger buffer. Secondly, these relationships are natural, exist today, and have existed in the past. And, finally, the maintenance of this spread is not borne by the ratepayer, since the over-all capital cost remains constant.

The next step is to determine what over-all rate of earnings is necessary in the natural gas industry to establish the total market value of investment at 115 per cent of book value. Inasmuch as we are dealing with the over-all investment relationship and not with the common stock investment relationship at this juncture, the nature of capital structure loses significance.

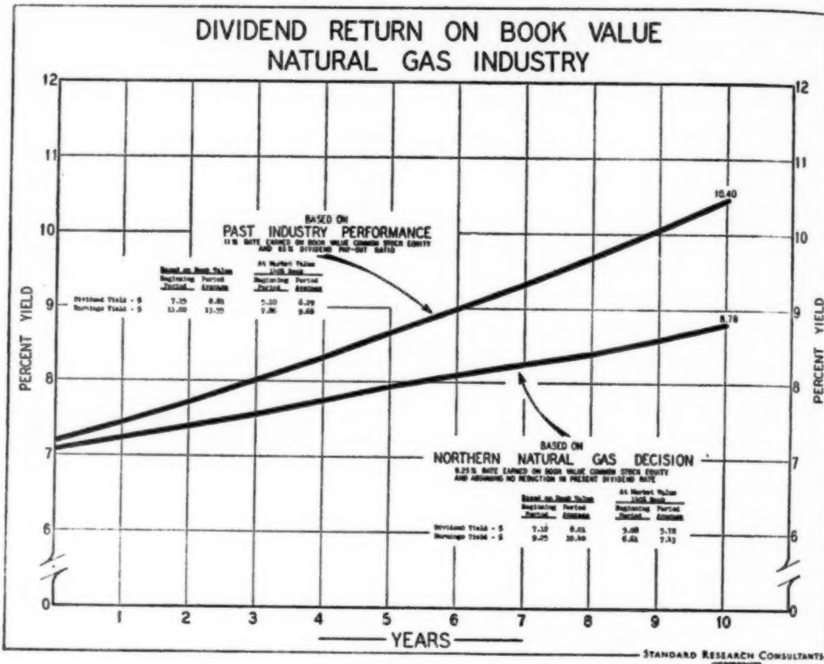
[2] This figure is derived by deducting 80 from 115, and dividing by 20.

THERE is plotted on the accompanying chart (page 833), for each of the 12 natural gas companies (5 pipeline companies and 7 distribution companies) referred to in the first of this series of articles,[3] (1) the per cent earned on over-all capital, in relation to (2) the per cent market to book value of total investment. It will be seen that, as the per cent earned on total investment increases, the ratio of market to book value of total investment also increases. These plottings do not appear on a straight line, but they do show a definite tendency for the ratio of market to book value of total investment to increase as the rate of earnings to total investment increases. The line of regression, extended through the data, may be used to determine the per cent of earnings required to sustain market value of over-all investment at 115 per cent of book value. The regression line crosses the 115 per cent line at a point which indicates 7.22 per cent as the amount required, on average, to maintain the value of total investment at 115 per cent of book value.[4]

Attention may now be directed to collateral data illustrating the extent to which the ratio of market to book value of common stocks of natural gas companies varies with variation in capital structure. The per cent market to book value is now plotted in relation to per cent of fixed-charge capital to total capital for each of the 12 com-

[3] "Impact of the Northern Natural Gas Decision on Financing." By Ralph E. Badger. PUBLIC UTILITIES FORTNIGHTLY, November 20, 1952, page 751.

[4] This study was extended to include all pipeline companies for which adequate data are available. The estimated over-all requirement was changed from 7.22 per cent to 6.91 per cent by the inclusion of these additional companies.



SUPPORTING MATERIAL FOR CHART
SHOWING DIVIDEND RETURN ON BOOK VALUE
NATURAL GAS INDUSTRY

"A"—Assuming earnings on book value common stock at 11% and pay-out ratio equal to 65%.

$x =$	$(1 + R \cdot P_o)^x R$	*Pay-out Ratio*	$y =$
1	.114	.65	.074
2	.119	.65	.077
3	.123	.65	.080
4	.128	.65	.083
5	.133	.65	.086
6	.138	.65	.090
7	.143	.65	.094
8	.149	.65	.097
9	.155	.65	.100
10	.160	.65	.104

"B"—Assuming earnings on book value common stock at rate allowed in Northern Natural Gas decision.

$x =$	$(1 + R \cdot P_o)^x R$	*Pay-out Ratio*	$y =$
1	.094	.77	.072
2	.096	.77	.074
3	.098	.77	.075
4	.101	.77	.078
5	.103	.77	.079
6	.105	.77	.081
7	.107	.77	.082
8	.109	.77	.084
9	.112	.77	.086
10	.114	.77	.088

panies previously referred to. (See chart, page 834.)

It is at once apparent that as the debt component of a company increases so does the ratio of market to book value of common stock. It may also be determined from the line of estimate that, on average, the common stock of a company with 50 per cent fixed-charge capital should sell at

about 160 per cent of book value. This compares with the 30 per cent allowance made earlier in the development of over-all earnings requirements for natural gas companies.

Approach II—Determination Over-all Earnings Requirements—Natural Gas Companies—Formula Method

UNDER Approach II, certain basic facts are related to a formula. These facts are: (1) The average rate earned on common stock equity by the natural gas industry has not been less than 11 per cent in recent years; (2) the dividend pay-out ratio for the industry has averaged about 65 per cent; and (3) a typical company will have about 50 per cent of investment in the form of fixed-charge capital. From these facts, a simple formula may be developed for the purpose of determining an annual rate of growth of common stock investment for the industry consistent with historical performance. This rate of growth, generic to the industry, has been an important factor in attracting capital to the industry at constantly lowering earnings-price ratios. The rate of earnings on common, to wit: 11 per cent and a 65 per cent pay-out ratio have been the two factors which have caused the current levels of earnings-price ratios found in respect to common stocks of natural gas companies. These two factors may be combined into a formula for determining rate of growth, as follows:

$$y = (1 + R \cdot P_0)^x$$

y = Book Value of Common Stock Investment (in unit of \$1, with x at 0)
R = Rate Earned on Common Stock
P_0 = 1.00 Less Pay-out Ratio
x = Number of Years

This basic formula was used for developing the accompanying charts (pages 836, 838, and 840) showing normal or standard growth for the natural gas industry. This growth represents the performance which the investor has reason to expect will characterize the industry over a future period of years.

THE first of these charts (page 836) shows the annual rate at which \$1 of book value of common stock equity in the natural gas industry will grow if the industry rate of earnings on book value of common stock investment is 11 per cent and if this rate is maintained in connection with a 65 per cent pay-out ratio.[5] The lower curve shows the growth potential for natural gas companies, based on the return allowed in the recent Northern Natural Gas decision, assuming no reduction in current dividend rates.

The second chart (page 838) shows (1) the annual earnings, annual capital appreciation, and annual total return per \$1 of original investment, on the basis of the average rate earned by the industry on its common stock investment, 1946-1951,[6] and a 65 per cent pay-out ratio; and (2) similar

[5] It is interesting to note that if this rate is cumulated over a period of ten years, \$1 will reach \$1.459 at the end of the period. This cumulated total compares with a similar figure of \$1.56, based on the past ten years' actual average growth of the 12 natural gas companies previously referred to (5 pipeline companies and 7 distribution companies). It is apparent from this calculation that the basic facts assumed for the computation of the charts here under consideration were, if anything, less favorable than actual industry performance.

[6] All natural gas companies reporting to the Federal Power Commission and deriving 50 per cent or more of revenues from natural gas operations earned, on average, 11.10 per cent on common stock investment, 1946-1951.

data based on return allowance in the Northern Natural Gas decision.

The third chart (page 840) and supporting data show (1) the dividend yield on book value per share, based on past industry performance, and (2) dividend yield based on the Northern Natural Gas decision and an assumed 65 per cent dividend pay-out ratio.

Attention may now be focused upon the material contained in the boxes on the chart, page 840. The current rate of dividend on book value is 7.15 per cent. Over the period, this yield will average 8.81 per cent. However, market values of natural gas company stocks are on average about 140 per cent of book value. Thus, current yields are 5.10 per cent, but should average 6.29 per cent over a 10-year period. Similarly, current earnings-price ratios, on the basis of book values, are 11 per cent, but will average 13.55 per cent. Reduced to current market ratios, the current earnings-price ratio becomes 7.86 per cent, but the investor actually expects about 10 per cent.

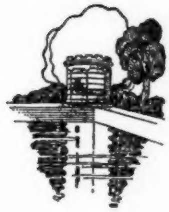
It is interesting to test these ratios, deductively arrived at, with the empirical facts. In June, 1952, 35 gas distribution company stocks averaged to sell at 5.1 per cent in terms of yield and at a 7.2 per cent earnings-price ratio.

The obvious conclusion is that investors expect not 5.10 per cent in the way of a dividend yield over a period of years but 6.3 per cent. They expect to average at least 9.7 per cent in the way of an earnings-price ratio, not 7.1 per cent, but the realization of this expectancy is dependent upon the continuation of past performance in the industry.

The data here presented may now be used to compute over-all earnings requirements for a typical natural gas company with 50 per cent in debt and 50 per cent in common stock capital:

Type of Capital	*Per $100*	*Rate Effective*	*Charge Total*
Bond or Debt	$50.00	3.00%	$1.50
Common Stock	50.00	11.00	5.50
Totals	$100.00		$7.00
		Required Return	7.00%

This result may be further examined. Assume that the book value of the stock of the company under consideration is $50. An 11 per cent return would produce $5.50 of earnings. An assumed earnings-price ratio of 9 per cent would cause this stock to sell at $61.11, or 122 per cent of its book value. An assumed earnings-price ratio of 8 per cent would cause this stock to sell at $68.75, or at 137.50 per cent of its book value. Thus, at an assumed earnings-price ratio of between 8 per cent and 9 per cent the stock of our hypothetical company would sell at between 122 per cent and 137 per cent of book value. This margin of 22 per cent to 37 per cent is no more than adequate to provide for marketing costs, market pressure created by the sale of additional stock, and the normal risk of short-term market fluctuations, and to assure the ability of the company to acquire additional common stock capital as necessary on terms equitable to existing stockholders.



Free Flood Control by Utilities On Wisconsin Rivers

This article gives us an interesting point of view on the subject of multipurpose river developments. It is not only a theory but a fact that Wisconsin utilities, including co-operatives, are performing governmental type services without charge as part of their hydroelectric development.

By ARNO T. LENZ*

Recent record floods on the Missouri and upper Mississippi rivers have focused national attention on flood control and everyone who lives near a river wants to know if he is likely to be in a flood zone when the river flow increases beyond bank full stage. A specific answer for any area depends on many factors which have to be evaluated for the particular area studied. Only one thing is certain: When a river needs room to take care of surface runoff it will take the room it needs and those in its way will suffer.

Man can help himself, however, and does in several ways. One way is to build levees and dykes to confine the river to a selected channel. Omaha and Council Bluffs, Iowa, use this method to protect high value districts and were successful this spring in keeping the muddy Missouri from many doors. Kansas City was not so successful with the same method last summer because the Kansas river flood flow exceeded the capacity of the channel. Another way to protect an area is by storage of flood runoff in upstream reservoirs. This reduces the peak flood rate and the height to which the river will rise in the channel downstream. Watershed management also helps to reduce floods, though the degree of protection afforded is a subject of controversy among people interested in flood control.

Another controversy is over the question as to who will pay the bill for this flood protection. This question is too large for the scope of this discussion, but when we get something for nothing it is newsworthy. Such is the case here in Wisconsin where, on the Chippewa and Flambeau rivers as well as on the Wisconsin, the existing reservoir systems and power

*For personal note, see "Pages with the Editors."

dams actually are operated to provide flood control at no cost to the people in the valley and, strange as it may seem, also at no cost to the people who pay the power bills. This is really getting something for nothing.

Let us look at the record for this spring of 1952. Four reservoirs of the Chippewa and Flambeau Improvement Company system, Chippewa (P. K.), Moose Lake, Flambeau, and Rest Lake, stored 16 billion cubic feet of water which would have run off during the spring flood period. This has occurred not only this year, but every year since 1926 when the Flambeau reservoir, the last of the four, was constructed. In addition, this year, 6 billion cubic feet of water was stored at Wissota, Holcombe, Flambeau, and other power dams, making a total of 22 billion cubic feet stored. Part of this storage capacity is of recent origin. The new Flambeau plant of the Dairyland Power Co-operative went into operation in 1951 and stored nearly a billion cubic feet this year. The Holcombe plant of the Northern States Power Company went into operation in 1950 and stored 1.35 billion cubic feet this year. The Wissota plant, also owned by Northern States, stored 3.46 billion cubic feet this year and has been operated in the same manner since its construction in 1917.

THESE are large numbers; what do they mean? Normally, the spring breakup in the Chippewa and Flambeau rivers occurs about March 20th. For the next two months, and sometimes also in June, the flow is greatly in excess of average because of melting snow and runoff from spring rains. Without reservoirs these 22 billion cubic feet now stored would run off with that from areas which are not controlled by storage reservoirs. Twenty-two billion cubic feet running off in two months would increase the uncontrolled flow by 4,244 cubic feet each second of the two months.

Ordinarily the peak flow is greater than the average for the 2-month period, so it is well to examine shorter periods also. The reservoir effect varies for different points. At a new gauge on the Flambeau river near Bruce, Wisconsin, the United States Geological Survey recorded high flows from April 17th through the 26th, 1952. According to F. C. Christopherson, district engineer in Madison, the average flow for five of the highest days, April 20th through 24th, was 10,328 cubic feet per second (cfs). Allowing for time of water travel between the Flambeau and Rest Lake reservoirs, the actual measured storage in these reservoirs would have increased the flow 3,958 cfs or 38 per cent. This would have raised the river level 2 feet, from 8.2 to 10.2 on the gauge. When rivers are in flood a 2-foot rise in level often means many dollars in additional damage. At Omaha this year, a 2-foot increase in level would have overtopped the levees and completely covered all low areas with resulting disaster.

AT Chippewa Falls this year the five days of highest flow would have been April 21st through 25th with a flow of 33,030 cfs. The reservoir system reduced the flow by 8,010 cfs to 25,020 cfs, a reduction of 32 per cent of the measured flow. Had the reservoirs not been in operation the gauge reading would have been increased

from 12 to 14 feet. Again a 2-foot reduction in flood level was obtained. These are figures which mean something to all of us.

BUT why is this free? Storage reservoirs cost money. Land costs money and so do dams. True, but the water stored during flood times is used during periods of low flow. For example, the U. S. Geological Survey reports that in January, February, August, and September of 1949, the last year of published records, the Chippewa and Flambeau reservoir system increased flows at Chippewa Falls by 516, 669, 486, and 577 cubic feet per second, respectively. These increases varied from 20 to 69 per cent of what the monthly average flows would have been without reservoirs. When one remembers that water stored in the Chippewa and Moose Lake reservoirs is used in 6 power plants with a total head of 277 feet, it is evident the water-power return is sufficient to pay the cost of storing the water. Flambeau and Rest Lake storage water is used in 15 plants with a total head of 518 feet. Highest head is developed at the new Flambeau plant of the Dairyland Power Co-operative, with 66-foot head and 20,100-horsepower capacity. Greatest power is developed at the Wissota plant of the Northern States Power Company (Wisconsin) with a capacity of 47,-300 horsepower at 57-foot head.

THERE are other free by-products of this water storage besides flood control. When low flows are increased there is more water in the river system below for recreation and disposal of wastes from sewage treatment plants. Finally, but not of the least importance, the lakes created by these dams afford cottage sites and are wonderful for fishing, swimming, and boating. Come to see them in Wisconsin.

Where are they?

There are literally hundreds of creeks, streams, and rivers which flow into the Chippewa river. The largest of these rivers is known as the Flambeau, its source being near Mercer. The Flambeau river flows into the Chippewa approximately eleven miles north of Holcombe. The second largest river is the Red Cedar river, its source being north of Rice Lake.

HYDROELECTRIC GENERATING PLANTS
LOCATION—FLAMBEAU RIVER

Plant Name	*Owner*	*Normal Head-Feet*	*Rated Capacity*	*Normal Pond-Area Acres*	*Pond Elev. Msl. Datum*
Upper Dam	Flambeau Paper Company	17	1,950 H.P.		
Lower Dam	Flambeau Paper Company	18	1,800 H.P.		
Pixley Rapids	Flambeau Paper Company	21	2,650 H.P.		
Crowley Rapids	Flambeau Paper Company	21	2,700 H.P.		
Big Falls	Lake Superior District Power Co.	52	12,000 H.P.	380	1,233
Flambeau	Dairyland Power Co-operative	66	15,000 Kw.	1,900	1,183.5
*Ladysmith	Lake Superior District Power Co.	16	2,150 H.P.	236	1,114.6
*Port Arthur	Lake Superior District Power Co.	18	700 H.P.	360	
*Thornapple	Lake Superior District Power Co.	12	1,500 H.P.	295	

*Leased by Dairyland Power Co-operative.

The Red Cedar river flows into the Chippewa river near Downsville, just north of Durand. All three of these rivers are entirely in the state of Wisconsin.

The natural flow of the Red Cedar, Flambeau, and Chippewa rivers normally is quite flashy with extremely high water during the months of April, May, and sometimes in June, with extremely low flows during July and August, then medium flows in September, October, and November, and low flows in December, January, and February. Because of the rapid slopes of these rivers—approximately a 750-foot drop or difference in elevation between the source and the mouth of the Chippewa river—they are well suited for water-power development in so far as head is concerned.

BECAUSE of the extreme variation in stream flow, a system of water storage reservoirs has been constructed near the headwaters of the Chippewa, Flambau, and Red Cedar rivers to provide a more uniform flow. These reservoirs are used to store water, thus reducing flows during medium and heavy rainfall periods, and to release water during low rainfall periods or so-called dry seasons of the year. The large bodies of water or lakes created by these reservoir dams also provide excellent recreational facilities, such as boating, fishing, swimming, etc.

There are two water storage reservoirs near the headwaters of the Chippewa river. The water storage reservoir nearest the source is located on the west fork of that river near Hayward, Wisconsin, and is known as the Moose Lake reservoir. This reservoir is owned and operated by the Chippewa & Flambeau Improvement Company.

Approximately eight miles northwest of Winter, directly downstream from the juncture of the east and west forks of the Chippewa river, a dam has been constructed creating the Chippewa (P.K.) water storage reservoir. This reservoir is owned by the Northern States Power Company (Wisconsin) and is operated under lease from it by the Chippewa & Flambeau Improvement Company.

Near the headwaters of the Flambeau river, two water storage reservoirs have been constructed, both of them owned and operated by the Chippewa & Flambeau Improvement Company. The first up-stream reservoir is located on the Manitowish river near Mercer, Wisconsin, and is known as the Rest Lake reservoir.

The water released from the Rest Lake reservoir flows into the Manitowish river, which in turn flows into a water storage reservoir known as the Flambeau reservoir, which is created by a dam located north of Park Falls.

Near the headwaters of the Red Cedar river north of Rice Lake, four water storage reservoirs, owned and operated by Northern States Power Company (Wisconsin), have been constructed.

IN addition to this above rather extensive water storage reservoir system, nineteen hydroelectric generating plants have been constructed on the Chippewa, Flambeau, and Red Cedar rivers. These plants utilize the more uniform flow of water throughout the various seasons of the year, provided

HYDROELECTRIC GENERATING PLANTS
LOCATION—CHIPPEWA RIVER

Plant Name	*Owner*	*Normal Head-Feet*	*Rated Capacity*	*Normal Pond-Area Acres*	*Pond Elev. Msl Datum*
Holcombe	Northern States Power Co. (Wis.)	42	33,750 Kw.	4,250	1,045
Cornell	Northern States Power Co. (Wis.)	38	2,160 Kw.	800	1,002.7
Jim Falls	Northern States Power Co. (Wis.)	55	14,400 Kw.	1,000	953.7
Wissota	Northern States Power Co. (Wis.)	57	35,280 Kw.	6,200	898
Chippewa Falls	Northern States Power Co. (Wis.)	29.6	21,600 Kw.	235	839.5
Dells—Eau Claire	Northern States Power Co. (Wis.)	27	600 Kw.	1,100	795
Dells—Eau Claire	Eau Claire Dells Improvement Co.	27	8,900 Kw.	1,100	795

by the operation of the reservoir systems.

The tabulations on pages 845, 847, and 848 give information showing location, ownership, head developed, etc., of these hydroelectric generating plant developments.

Starting in December and January of each year, depending on weather conditions, careful checks are made at regular intervals by employees known as reservoir patrolmen, as well as reservoir caretakers, to determine the water content of swamps, ground water, amount of snow in woods, also on the ground, and water content of snow, etc., in the drainage area of the Chippewa, Flambeau, and Red Cedar river reservoirs. This information is utilized to determine the extent to which the water storage reservoirs and larger hydro plant lakes should be drawn down prior to the spring breakup of the rivers to prevent extremely high flood stages in these rivers during the spring runoff and, also, to have available water reservoir storage capacity sufficient to provide more uniform flows in the rivers throughout the year.

DURING a normal season, with the swamps freezing up in the fall wet, with average snowfall or more, arrangements are made to have all water storage reservoirs drawn down to near the agreed minimum elevations by at least March 15th, because the average spring breakup on these rivers occurs about March 20th. In addition, in order to provide more water storage capacity, beginning dur-

ing the first or second week in February, depending on weather conditions, with water levels of the lakes created by the Flambeau, Holcombe, and Wissota hydro plant dams are slowly and gradually lowered by increasing the flow of water passed through the water wheels so that by at least March 20th the Holcombe pond has been lowered 10 feet, Flambeau 7.5 feet, and Lake Wissota has been drawn down about 15 feet. A decrease in the pond elevation of 10 feet at Holcombe provides a water storage capacity there of 1.85 billion cubic feet, and an additional water storage capacity of approximately 4 billion cubic feet is obtained by lowering Lake Wissota 15 feet.

Lowering Flambeau pond 7.5 feet creates storage of nearly 1 billion cubic feet.

THERE are several important reasons for drawing down the levels of the Holcombe, Wissota, and Flambeau lakes each spring:

1. Reduces spring floods below these dams. By drawing down the levels of these two lakes the crest of the spring flood between the water storage reservoir dams and these lakes is absorbed by filling Flambeau, Holcombe, and Wissota lakes, thus materially reducing the flow in the river below Wissota while the smaller creeks flowing into the Chippewa below these dams are at maximum flood stages.

2. Permits the owners to do very necessary maintenance work on spillway gates, concrete structures, water intakes, embankments, etc., thus enabling the company to properly maintain the safety of the structures.

3. Increases the amount of kilowatt hours generated.

4. Permits lake shore property owners to make necessary repairs to their docks, embankments, and similar property.

When the spring runoff starts, the water storage reservoir gates are closed down to a predetermined amount, to discharge through the gates only sufficient water to maintain fish life directly below the reservoir dams. The water storage reservoirs then store practically all of the water flowing into the river above them, reducing the flood stages of the river below, while Flambeau, Holcombe, and Wissota ponds absorb the crest of these flood waters.

IN order to provide a more uniform flow in the rivers below, the water storage reservoir dams are operated to store water during spring flood period, usually from the latter part of March until the latter part of June; then during July and August, when there are practically no general rains,

HYDROELECTRIC GENERATING PLANTS
LOCATION—RED CEDAR RIVER

Plant Name	*Owner*	*Normal Head-Feet*	*Rated Capacity*	*Normal Pond-Area Acres*	*Pond Elev. Msl. Datum*
Rice Lake	Northern States Power Co. (Wis.)	12	320 Kw.	1,045	
Colfax	Wisconsin Hydro Electric Co.	22	1,950 H.P.		
Cedar Falls	Northern States Power Co. (Wis.)	52	6,000 Kw.	1,800	872.4
Menomonie	Northern States Power Co. (Wis.)	21	1,200 Kw.	860	804.5

water is released from the reservoirs; then during September, October, and November water in smaller quantities is stored, and water is discharged from them again during the winter months of December, January, February, and during most of the month of March.

Thus, the water storage reservoir systems on the Chippewa, Flambeau, and Red Cedar rivers are utilized to store water during the plentiful rainfall months, periods of high stream flows, and to increase river flows during the less rainfall periods, dry seasons of the year; thus materially reducing spring floods, providing more uniform river flows and, in addition, providing excellent facilities for fishing, boating, and other recreation for which the northern part of Wisconsin, in the vicinity of these reservoirs, is noted and well known.

Charity Begins at Home

"ONE of the unpredicted effects of the government's foreign aid program has been to make Congress more sympathetic to appropriations for domestic public works, like dams and irrigation projects, on the ground that if we can do so much for other countries we can afford to do something for ourselves, or, to say it bluntly, that if we are going to ruin public credit, let there be somewhat to show for it here as well as abroad. Senator Wherry, for one, recently justified his vote in favor of eight reclamation projects by saying that if we were going to continue building towns, roads, schoolhouses, dams, irrigation works, and power plants in Italy, Portugal, Africa, the Belgian Congo, and elsewhere, he could see no reason why we shouldn't be building some like things for ourselves. He could not understand Senators who had voted everything the government asked for in the way of aid to foreign countries and then hammered appropriations for similar projects in their own country. He said:

> *"'There are reclamation projects in nineteen or twenty foreign countries which are receiving ECA (Marshall Plan) funds. What we are giving away in Italy and elsewhere in the world we are denying to our own people.'*

"Senator Mundt said:

> *"'If we are going to do it, the only way we can possibly escape national insolvency is to expand our tax base. We must develop new sources of wealth in order to carry on such programs in foreign countries.'*

"That meant voting for more reclamation projects at home. Thus, the more we give away the more we must spend on public works in order to create more wealth to give away."

—EDITORIAL STATEMENT,
The Freeman.

Washington and the Utilities

The Unknown Future

TWENTY years are a long time. It is only natural that a good many people in Washington bureaus, who expect to stay on after the big change next January, are having difficulty getting into the habit of thinking about policy changes. It is especially difficult in those bureaus and agencies which have to do with policies affecting public utilities for two reasons: (1) The Roosevelt-Truman policies were always pretty critical if not actually hostile to the investor-owned tax-paying utility companies on any issue of possible conflict with Federal bureau expansion; (2) because utilities were not an issue in the campaign (despite Truman's best efforts to the contrary), only the barest and vaguest ideas are available as to what position President-elect Eisenhower or his unnamed policy-making appointees will take.

True, as a candidate, General Eisenhower expressed some over-all convictions about the necessity for more grass-roots participation, at the state and local levels, in Federal bureau operations and more partnerships with business interests where situations permit it. He was pretty definite about returning title of off-shore oil and gas lands to the states. On the subject of *regulatory* policy, he is not even on record; and there was no particular reason why he should be for campaign purposes.

But this doesn't make it any easier for the "working people"—meaning the career personnel and subordinate officials, who must prepare for transition from the utility-baiting leadership of President Truman to an atmosphere which is generally expected to be more tolerant of private utility business aspirations.

Bills in Congress

OF course there is active speculation as to what direction the next administration will take, and what positive changes will be made by act of Congress. Summing up the item-by-item outlook from the standpoint of a bare three weeks after the election, the following prospects seem to emerge:

Interstate compact legislation will probably be recommended by the next administration for new river basin developments. But it is too early to forecast what Congress will do about them since they face long hearings and considerable debate if they reach the floor. There is plenty of fight left in the old "public power bloc," especially in the Senate where the revolting Senator Morse (Independent, Oregon) will be joined by two new public power enthusiasts, Senator Jackson (Democrat, Washington) and Mansfield (Democrat, Montana). There will also remain such hard-core "authority" advocates as Murray (Democrat, Montana), Humphrey (Democrat, Minnesota), Hill (Democrat, Alabama), and Lehman (Democrat, New York).

Fair Deal new project legislation is *about dead.* This means not only the "authority" bills but also such Interior Department bills as the Hell's Canyon dam on the Snake river and the Central Arizona project. Some arrangements may have to be made to step up Pacific Northwest power production in view of the hydro shortage there, but not necessarily along the lines of the Bonneville steam plant proposal urged by Truman in the 82nd Congress.

Correcting the Supreme Court. There may be several bills of this type,

"clarifying" the intent of Congress in the light of decisions of the U. S. Supreme Court which do not find favor with the new administration. Returning the tidelands to the states is the outstanding example. It should get fairly prompt action. Then, there is the O'Conor bill passed by the Senate in the 82nd Congress, to get around the East Ohio Gas Company decision, giving the Federal Power Commission jurisdiction over intrastate gas distributors. This will certainly be revived and quite possibly enacted. There is also a similar bill, which retiring Senator O'Conor (Democrat, Maryland) talked about but did not get around to introducing, to amend the Federal Power Act in the light of analogous court decisions upholding FPC jurisdiction over local electric utility operations. If the Supreme Court should uphold the Interior Department over the FPC in the forthcoming Roanoke Rapids Case, there will be strong sentiment in Congress for more corrective legislation to restore FPC's licensing authority regardless of Interior Department wishes.

There is also the recent 7-to-0 decision in the Idaho Power Company Case, giving FPC the right to make conditions in licensing transmission lines crossing government lands, so as to let the Federal power agencies use the existing capacity of such private lines. Congress may not want to change this. Similar authority exercised by the Interior Department over licensing natural gas pipelines crossing public lands is also in question. But there will be reaction and quite possibly some bills introduced in Congress.

RURAL ELECTRIFICATION ADMINISTRATION *legislation.* From time to time even in the Democratic Congresses, there have been some criticisms of REA loan policy such as the "super co-op" loans whereby generating plants and transmission lines are financed by REA and then leased back to the Interior power bureau. This type of loan is the subject of litigation now pending in the U. S. District Court for the District of Columbia. But the old Congresses did not see fit to do anything in the way of positive legislative reforms. The new Congress may not do anything either. The people over at REA feel that they have a pretty strong protective influence in the person of the next chairman of the Senate Agriculture Committee, Aiken (Republican, Vermont). Of course, there are also those restrictions which might be written into REA appropriation bills.

POWER *preference clause.* One controversial target of the investor-owned power companies is the clause which appears in a number of Federal power project statutes requiring Interior and other Federal agencies to give an absolute priority to publicly owned power agencies in the sale of power from Federal projects. Private companies have long contended that this is a discrimination, not simply against private companies *per se,* but against a great majority of the American citizens who are served by private electric companies.

Such discrimination has also been charged by the state commissioners, who condemned it at their 1951 convention in Charleston, South Carolina, and again in their meeting last month at Little Rock, Arkansas. President H. N. Beamer of the Idaho commission specifically asked the state commissioners' association to endorse specific legislation in the next Congress to remove this preference clause from various Federal statutes. He traced its origin back to the Tennessee Valley Authority Act of 1933, denying the claim of public ownership zealots that the policy goes back to the Reclamation Act of 1906. Anyhow, with state commission support, such legislation should at least get a fair hearing in the next Congress.

New Faces and Old Faces

SPECULATION continues to revolve about the attitude of such personalities in the next administration as the Secretaries of Interior, Agriculture, etc. Most concern about the Interior post seems to center on how Governor Doug-

las McKay, Republican of Oregon, named by Eisenhower to succeed Secretary Chapman, feels about power policy, other than opposing "authorities" and favoring "home rule" and interstate compacts.

For the Agriculture post Ezra T. Benson of Salt Lake City was selected.

There is no such uncertainty about the *departure* of the Truman appointees, now occupying these positions. There is also the certainty that the President-elect will appoint new chairmen to the Federal regulatory commissions because that is his right by law. Chairmen of three Federal regulatory commissions concerned with public utilities (Federal Power Commission, Federal Communications Commission, and Securities and Exchange Commission) are reported prepared to tender their resignations, as chairmen, as soon as the new administration takes office. Cook (SEC) will continue as a member. Buchanan (FPC) and Walker (FCC) may even quit altogether.

Secretary of Interior Oscar L. Chapman plans to return to Denver, Colorado, to practice law. Agriculture Secretary Brannan, also a Denver lawyer, said he was going back. Michael W. Straus, Reclamation Commissioner under Chapman, announced his resignation, effective January 20th. He expressed a willingness to stand by after that date, if necessary, pending a successor. REA Administrator Wickard seems prepared to stay on through his statutory term (1955). Major General Samuel D. Sturgis, Jr., has been named to succeed Lieutenant General Lewis A. Pick as Chief of Army Engineers, a change-over not connected with politics exactly.

In Congress there will be plenty of changes, of course, with the shift of political control. Both chairmen of the Interior Affairs committees in Congress were defeated for re-election. They are Senator O'Mahoney (Democrat, Wyoming) and Representative Murdock (Democrat, Arizona). With the Republicans reorganizing both chambers, the following shifts will take place in the chairmanship of key committees: Senate Agriculture (REA), Aiken (Republican, Vermont), replacing Ellender (Democrat, Louisiana); Senate Appropriations, Bridges (Republican, New Hampshire), replacing McKellar (Democrat, Tennessee); Senate Interior Affairs, Butler (Republican, Nebraska); Senate Interstate Commerce, Tobey (Republican, New Hampshire), replacing Johnson (Democrat, Colorado); Senate Public Works, Martin (Republican, Pennsylvania), replacing Chavez (Democrat, New Mexico); House Agriculture, Hope (Republican, Kansas), replacing Cooley (Democrat, North Carolina); House Appropriations, Taber (Republican, New York), replacing Cannon (Democrat, Missouri); House Interior Affairs, Crawford (Republican, Michigan); House Interstate Commerce, Wolverton (Republican, New Jersey), replacing Crosser (Democrat, Ohio); House Public Works, Dondero (Republican, Michigan), replacing Buckley (Democrat, New York).

OPS Order to Curb Gas Price Escalator Contracts

The Office of Price Stabilization has finally taken action on its long-delayed escalator clause order, affecting natural gas supply controls. The agency amended OPS Ceiling Price Regulation 17, which governs natural gas prices, so as to prevent price increases caused by the operation of "escalator" clauses from setting a pattern of prices in a producing area higher than the level at which they were frozen in January, 1951. (Escalator clauses are provisions in sales contracts calling for price increases at stated intervals or under specified conditions.)

Under CPR 17, no contracts made after January 25, 1951—when price ceilings were imposed—may contain escalator clauses providing for prices higher than the general area ceiling. The escalation provisions of contracts made before that date, however, are permitted to take effect even though they may result in higher contract prices.

Exchange Calls And Gossip

Communications Taxes Criticized At NARUC Meeting

ONE of the high lights at the annual meeting of the National Association of Railroad and Utilities Commissioners at Little Rock, Arkansas, last month was the report of the association's special committee on the effect of taxes on utility rates. The committee report showed that the combined revenues and the combined tax charges of the various privately owned utility groups for the year 1951 "amounted to staggering totals." Telephone utilities ranked third, behind electric and water utilities, in percentage of operating revenues paid out in corporate taxes—$659,279,145 out of total operating revenues of $3,817,536,-794, or 17 per cent. In excise taxes, the toll telephone, telegraph, and radio paid out $375,361,992—an increase of 12.5 per cent over 1950.

"The telephone long-haul toll excise tax of 25 per cent is the highest nonluxury tax assessed against any service or commodity," the report stated, pointing out that it is greater than the generally accepted luxury tax level on such items as furs, diamonds, jewelry, and for admissions to cabarets and for club dues which all carry a 20 per cent maximum excise tax. "Excise taxes on utility services are not only extremely burdensome but are discriminatory as well. This is true, particularly in the instance of the 25 per cent tax on long-haul distance telephone service and the tax on transportation," said the report.

Calling the tax discrimination against telephone users "grossly unfair," the committee recommended that the matter be called to the attention of Congress when the next tax bill is considered. The excise taxes on communications totaled $602,850,000 in the fiscal year 1950 and $670,261,000 in fiscal 1951, an increase of more than $67,000,000. Available figures for the fiscal year ending June 30, 1952, show a further increase to almost $706,000,000, the report said. The NARUC followed the advice of its committee and passed a resolution calling for the revision of excise taxes on communications services to the level "at most no higher than the tax rate applied to other nonluxury services . . ."

IN its summary of telephone rate developments, NARUC's committee on rates of public utilities reported that, while the cost of living has increased 86 per cent in the last few years, telephone rates have increased by less than half that amount. At the same time, the number of telephone subscribers has just about doubled, requiring unprecedented plant expansion at ever-increasing prices—about double those at the end of the war. The Bell system as well as the independent telephone companies have experienced increased costs of operation, not only in exchange but also in toll operations, the report said.

The committee noted that independent companies have had no general increases in the toll compensation schedules subsequent to 1946 and said cost studies are currently being made by the independent industry looking toward upward revision of these schedules.

Northwestern Bell Seeks Rate Boost

A REQUEST for an increase in telephone service rates for the state of Min-

nesota was placed before the state railroad and warehouse commission recently by the Northwestern Bell Telephone Company.

The company asked the commission to review its rate increase of last February to provide a new boost in rates averaging one cent a day for residential service and two cents for business telephones.

According to its vice president and general manager, the company needs an upward adjustment because of higher wages recently granted employees in a new union contract. Present rates are based on 1951 costs.

The company has asked for higher rates on person-to-person calls between Minnesota towns ranging from 10 to 15 cents for the first three minutes. Station-to-station calls would remain the same. The increases would amount to 60 cents a month for one-party business and rural business service and 50 cents for one-party business message service. The residential increases would range from 20 to 35 cents, with 30 cents for rural service. The company said its net increase would be about $200,000 a month, or $2,400,000 a year, if the commission approves the request.

REA Telephone Loans

The Rural Electrification Administration has approved two loans, totaling $534,000, to expand telephone service in Texas and Wisconsin. The funds will be used to provide telephone service to 743 new subscribers and improved service to 910 present subscribers in five counties. New facilities to be constructed by the borrowers include 159 miles of line. The loans will also finance the rehabilitation and integration of existing and acquired properties. When completed, the systems will furnish modern service to a total of 1,653 rural families and establishments.

The two companies are the Rosebud Telephone Company, Rosebud, Texas, and Richland-Grant Telephone Co-operative, Blue River, Wisconsin. The Rosebud Telephone Company plans to use its $290,000 loan to build 125 miles of new line and convert its existing system to dial. A total of 1,037 subscribers —including 593 now without telephones —will receive modern telephone service as a result of the loan. The Richland-Grant Telephone Co-operative will use the $244,000 loan granted by REA to acquire the properties of five small telephone companies.

REA Holds Engineers' Conference

The Rural Electrification Administration is holding a symposium for engineers interested in REA-financed telephone construction to discuss the agency's design and construction specifications and procedures. The first section of the symposium was held in Washington November 17th to 25th. A second section is currently being held in Cheyenne, Wyoming.

Invitations were mailed to all consulting engineering firms that have expressed an interest in the new REA telephone loans program, and all qualified firms have been welcomed. Included in the meetings are explanations of the construction specifications in the standard REA construction contract, by means of movies, discussions, three-dimensional exhibits and demonstrations. Other subjects covered include numbering, traffic, connecting company agreements, telephone electronic equipment, and many others.

E. Woodrow Benckert, chief of the REA Telephone Engineering Division, presided at the Washington section and Assistant Chief Hoburg B. Lee at Cheyenne. "The purpose of these conferences," Benckert said, "is to let private engineering firms learn all we can show them about what our needs are, and for our people to learn all we can about what they are up against. We hope that when we get through, both sides will be able to work more quickly, more efficiently, and more economically to get telephones ringing in our farm homes."

Financial News and Comment

BY OWEN ELY

An Insurance Investor Looks At Natural Gas Securities

A PAPER on the topic "Financing the Natural Gas Pipeline Industry" was recently presented before the Independent Natural Gas Association of America in Omaha by H. C. Hagerty, financial vice president, and A. R. LaForce, third vice president, of the Metropolitan Life Insurance Company. Because of the great interest in this topic at this time, due to the serious problems facing the industry, we summarize the high lights of the paper as follows:

During the postwar period (to the end of 1951) the net tangible assets of straight natural gas transmission companies more than quadrupled, from \$600,000,000 to \$2.5 billion. Of the \$1.9 billion increase, about 72 per cent was financed through long-term debt, 7 per cent through preferred stock, 9 per cent through common, and 12 per cent through retained earnings. The average debt ratio for these companies increased from 45 per cent to 64 per cent, due to the reliance on debt financing. Practically the entire amount of the long-term debt (about \$1.4 billion) was purchased by U. S. life insurance companies——which already had made some commitments in this field during the 1930's, particularly in financing the expansion of Panhandle Eastern Pipe Line Company. At the present time the Metropolitan alone has invested or committed almost half a billion dollars in the bonds of natural gas pipeline companies.

Early in this period of expansion, the pipelines took the position that a high debt ratio, and resulting high equity leverage, was necessary to create earning power generous enough to induce equity investment in a "wasting asset" industry. In fact, considerable difficulty was encountered in selling the common stock of Transcontinental Gas Pipe Line despite a 75 per cent debt ratio, and industrial suppliers of the pipeline had to lend their support and buy part of the equity in the first instance.

THE life insurance companies found it possible to excuse or overlook these high debt ratios because of the following protective factors: (1) long-term purchase and sales contracts, extending beyond bond maturities; (2) provisions in contracts for distributing utilities to buy a minimum amount of gas, thus in effect guaranteeing that debt service

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would be covered in poorest years; (3) satisfactory experts' reports as to adequacy of gas reserves: (4) sinking funds providing for complete retirement of bond issues by maturity, and resultant rapid lowering of debt ratios; (5) provisions for accelerating sinking-fund payments if gas reserves should be depleted more rapidly than expected; and (6) the assumption that a favorable regulatory environment and policy would continue, permitting sufficient earnings to attract future capital as needed—particularly equity capital, which would constitute the margin of safety for debt investment.

Since much of this investment program was completed, economic conditions have changed substantially. Inflationary trends have developed with respect to cost of plant, payrolls, taxes, purchased gas, and other operating expenses. Moreover, interest rates have risen substantially, since lending institutions also have larger overhead to meet. To protect the original investment, the pipelines must now recover such additional costs with a minimum delay by repricing their services, and regulatory commissions, if they are to meet their responsibilities, must promptly allow the necessary rate increases.

However, these higher costs are apparently being disregarded by the Federal Power Commission, as revealed in the "increasingly unrealistic nature" of the recent Northern Natural Gas Company[1] and Colorado Interstate Gas Company[2] decisions. (The paper then described these decisions, and the mechanics used by the FPC in arriving at a 5¾ per cent "cost of money" for Northern Natural Gas Company.)

The "cost of money" doctrine as applied in these decisions fails in Hagerty's opinion to reflect fair return, because other factors such as the risks of the industry, the need to attract capital, changing business trends and price levels, and the need to reward management for efficiency, must also be taken into account, as established by court precedent.

If "cost of money" is to be tied to the fluctuations of the stock market, as the FPC seems to propose, this would involve continual readjustment of the rate of return; the decline in market prices of pipeline stocks following the two recent decisions would alone justify an application for higher rates. Moreover, the cost of money doctrine deals largely with the historical past and refuses to recognize that investors are concerned with *future prospects*. Also, it does not make adequate allowance for the unfavorable impact on market prices of large offerings of new stock.

The FPC policy of allowing only "bare bones" capital costs tends to penalize the management, since every saving in expenses and capital cost would have to be passed on to the consumer. Also, the cost of money doctrine would mean differing rates of return for companies with varying capital structures, which is contrary to court precedent; companies with a higher debt ratio would receive a lower over-all return, and the resulting tendency in regulatory circles would be to favor greater use of debt. Finally, application of the doctrine would tend to limit market movements of natural gas equities to a narrow range, and greatly restrict the growth and leverage factors which were important incentives in the original equity financing.

In 1946 buyers of pipeline equities were willing to pay prices which, with a 6 per cent over-all return and a 75 per cent debt ratio, represented an expected return on the common stock two or three years hence of 15 per cent-20 per cent. After such earnings were attained and dividend payments initiated, the market prices of the stocks moved upward to a level where the price-earnings ratio was about 10 per cent. In other words, the market appraised the 15 per cent-20 per cent return on book value at a 10 per cent rate, making market price twice the book value of the stock. Now the FPC says that the company can only earn this *market* rate of 10 per cent on

[1] 95 PUR NS 289.
[2] 95 PUR NS 97.

the *book value,* instead of the 15 per cent-20 per cent originally allowed. Investors are now told that they had no right to expect to earn a 15 per cent-20 per cent return on the book value, despite the fact that the FPC certificated the pipeline based on financial exhibits showing the benefits of such leverage to the common stockholder. Why should anyone continue to invest money in pipelines under such a policy of "heads I win—tails you lose"? Such action is tantamount to changing the rules in the middle of the game.

If the cost of money theory is to remain in operation, it appears likely that the natural gas industry will become static, with existing lines forced merely to operate without expansion until gas reserves are exhausted. Market prices would probably then decline to a level reflecting a balance between supply and demand for nongrowth stocks, in a wasting industry which enjoys only a limited return.

Recently the American Gas Association estimated that the gas industry would spend $5.6 billion for expansion in 1952-56, of which pipelines would account for $3 billion. The problem of raising this tremendous amount of capital comes at a time when the industry is experiencing costly delays in getting reasonably prompt decisions on necessary rate increases, and now these difficulties are further aggravated by the ramifications of the "cost of money" doctrine.

It is difficult to see how equity investors can be induced to commit their funds in substantial amounts under these conditions, since any future market appreciation in their stocks would call for immediate rate reductions. On the other hand, the investor could never be very sure that the commission would raise rates in the event of a sharp decline in stock prices, since the latter would be more apt to occur during a period of business recession. Thus, the operation of the cost of money doctrine would seem to be a one-way street. Moreover, because of the "wasting asset" characteristic of the natural gas pipeline industry, it is probable that in future prudent investors would increasingly demand higher returns on pipeline company stocks as compared with those of electric utilities. And the inability to sell adequate amounts of common stock to finance the expansion program would in turn make the institutional investor less willing to lend money, since the cushion or margin of safety for debt investment would be lowered.

Over the past twenty years, the regulatory commissions have gained increased powers, since in general the courts sustain them on fact finding, and usually on matters of judgment; in recent years there have been relatively few cases where the U. S. Supreme Court has reversed commission rulings. Hence, the investor must now give greater weight to the policies of the rate-making authorities, and institutional investors

CURRENT YIELD YARDSTICKS

	Recent	*1952 Range* High	*1952 Range* Low	*1951 Range* High	*1951 Range* Low
U. S. Long-term Bonds—Taxable	2.69%	2.77%	2.56%	2.74%	2.39%
Utility Bonds—Aaa	3.00	3.08	2.93	3.09	2.64
—Aa	3.05	3.11	2.99	3.18	2.70
—A	3.25	3.31	3.21	3.32	2.82
—Baa	3.46	3.58	3.46	3.58	3.21
Utility Preferred Stocks—High-grade	4.01	4.24	3.94	4.25	3.77
—Medium-grade	4.46	4.71	4.33	4.71	4.19
Utility Common Stocks	5.26	5.59	5.26	6.14	5.62

Latest available Moody indices are used for utility bonds and preferred stocks; Standard & Poor's indices for government bonds and utility common stocks.

are becoming concerned over the tendency of some commissions to "change the rules of the game." Moreover, in some instances the staffs appear to have obtained too much power and influence, as commissioners come and go, which adds to the uncertainties.

Rate of Return Allowed Telephone Utilities

In the last issue of this department, two charts on the trend of allowed rate of return during the period 1915-51 for gas and electric utilities were reproduced (with slight changes) from a book prepared by Arthur Andersen & Company, well-known accountants.

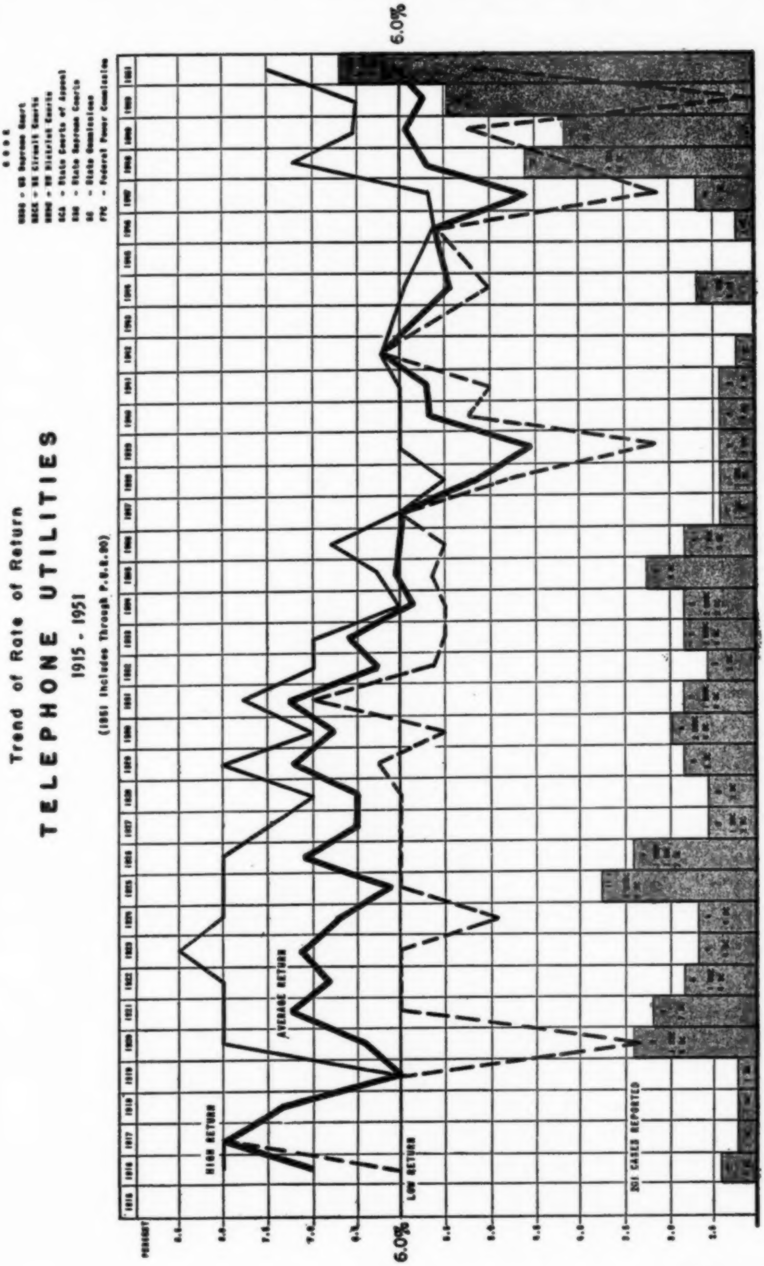
The chart on page 859 shows the trend of rate of return for telephone utilities, taken from the same source. The same general trend prevailed as with gas and electric utilities. During the period 1916-31, when high interest rates prevailed, maximum allowed returns ran as high as 8 per cent or $8\frac{1}{2}$ per cent and the average return (based on all rate decisions in each year) ran close to 7

LIST OF NEW YORK BROKERS' UTILITY ANALYSES*

	Firm	*No. Pages*	*Issued*
Company Analyses			
California Electric Power	Blyth & Co.	5	Sept.
Central Hudson Gas & Electric	Paine, Webber, Jackson & Curtis	2	Oct.
Central Illinois Public Service	Paine, Webber, Jackson & Curtis	3	Oct.
Cincinnati Gas & Electric	Argus Research Corporation	2	Nov.
Cleveland Electric Illuminating	Paine, Webber, Jackson & Curtis	2	Sept.
Duquesne Light Company	First Boston Corporation	11	Nov.
Electric Bond & Share	A. G. Becker & Co.	2	Sept.
El Paso Electric Co.	Ira Haupt & Co.	2	April
Montana Power Co.	Vilas & Hickey	16	Oct.
Niagara Mohawk Power	Argus Research Corporation	2	Oct.
Oklahoma Gas & Electric	First Boston Corporation	11	Nov.
Pacific Gas & Electric	Sutro & Co.	1	Oct.
Pacific Lighting Corp.	Paine, Webber, Jackson & Curtis	2	Sept.
Pennsylvania Power & Light	Paine, Webber, Jackson & Curtis	3	Oct.
Providence Gas	L. H. Rothchild & Co.	17	Sept.
**Puget Sound Power & Light	W. C. Gilman & Company	17	Oct.
Southern California Edison	Argus Research Corporation	2	Oct.
Southern Union Gas	Ken & Courtney	4	Nov.
Virginia Electric & Power Co.	Argus Research Corporation	2	Oct.
Washington Water Power	Blyth & Co.	23	June
**Washington Water Power	W. C. Gilman & Company	17	Oct.
Wisconsin Electric Power	Josephthal & Co.	2	Nov.
Wisconsin Public Service	L. F. Rothschild & Co.	4	Nov.
Wisconsin Public Service	Loewi & Co. (Milwaukee)	1	Nov.
General Topics			
Electricity from Nuclear Energy	Reynolds & Co.	1	Oct.
Outlook for Natural Gas Pipelines	Goodbody & Co.	4	Oct.
Regular Bulletins or Tabulations			
Public Utility Common Stocks	G. A. Saxton & Co., Inc.	2	Oct.
Semimonthly Review of Utility Companies	Paine, Webber, Jackson & Curtis	2	Nov.
Monthly Review of Utility Developments	Josephthal & Co.	4	Nov.
Monthly Bulletin on Current Developments in Utilities	Eastman, Dillon & Co.	10	Nov.

*Similar lists have appeared in the issues of October 9, July 17, April 24, and January 31, 1952, as well as in preceding years.

**Prepared for Allen & Co. in connection with the proposed merger of Washington Water Power and Puget Sound Power & Light.


Trend of Rate of Return
TELEPHONE UTILITIES
1915 - 1951
(1951 Includes Through P.U.R.3d)
HIGH RETURN
AVERAGE RETURN
LOW RETURN
251 CASES REPORTED
6.0%
6.0%

per cent. When the era of cheap money introduced by the Roosevelt régime began, this was accompanied by a broad decline in the allowed rate of return for telephone companies, which terminated around 1947-48 as interest rates began to harden. Since that year the average allowed rate of return has recovered to over 6 per cent and the maximum allowed in the earlier part of 1951 was 7.5 per cent.

The trend in 1950 was affected by one or two seemingly abnormal rate decisions, the "low return" in one out of 20 cases in 1950 being shown as only 2 per cent.

Inflation and Regulation

JUDGE John P. Randolph, general solicitor of the NARUC (National Association of Railroad and Utilities Commissioners), delivered an address at a recent convention of the Pennsylvania Waterworks Association. In this talk he made two valuable suggestions for adjusting the regulatory process to the present inflationary trend of costs. First, he proposed that the companies make greater use of "canned testimony" in order to speed up rate cases, so that the data presented will not become out-of-date by the time a commission renders a decision—which would be especially true where a case is also appealed to the courts.

The state commissions themselves should, of course, make every effort to expedite proceedings. Judge Randolph said:

> It has been suggested that time could be saved if the utility would prepare its exhibits and supporting testimony and submit them to the commission's staff and other parties who may be opposing the application at the time the application is filed. This would enable the staff to make a prompt analysis of the applicant's case and be prepared for cross-examination at an early hearing without the necessity of the customary recess at the end of applicant's case in order to prepare for cross-examination. This practice has frequently been adopted by various commissions and has proved to be a time saver.
>
> Recently the Federal Power Commission has been heard to complain that a number of companies subject to its jurisdiction have been filing applications for rate increases without being prepared to present the required evidence in support thereof, and that this practice has tended to exaggerate the regulatory lag. I would advise every utility seeking a rate increase to be fully prepared for a hearing at the time it files the application and that it adopt the practice of using the canned testimony that I have just described if it really wants a prompt hearing. I am sure that the regulators have no desire to delay rate relief any longer than is necessary to comply with the law.

SECONDLY, Judge Randolph suggested the use of index numbers in arriving at a rate base, in order to adjust for inflation. "This approach," he said, "has attraction in that it would express the investment in the same kind of dollars as is used to express the income, and so relate like quantities to obtain a rate of return. Such a calculation is easily made, requiring only the computation of the current value of each past year's capital commitment through the use of index numbers."

Those interested in the use of index numbers in adjusting the rate base might well study the proceedings in Duquesne Light Company's application for higher rates (the order of the Pennsylvania Public Utility Commission, dated August 29, 1951, and the decision of the superior court of Pennsylvania filed July 17, 1952). Company Exhibit 26 in the commission proceedings showed for each account (a) the original cost by years of construction, (b) the index number for July 1st of each year, (c) the trending factor for each year (the multiplier used to transpose original cost in each year to the price level of January 1, 1950), and (d) the trended original cost

by years of construction at the January 1, 1950, spot price level. The "trending factors" were derived from the published index numbers of Hayden, Marshall & Stevens, Boeckh, and *Engineering News-Record*. In the court decision, one of the exceptions made (in referring the case back to the commission) was the latter's rejection of 10-year average prices in favor of a 5-year period.

CURRENT ELECTRIC UTILITY STATISTICS AND RATIOS

	Unit Cost	Latest Month	Latest 12 Mos.	Per Cent Increase Latest Month	Per Cent Increase Latest 12 Mos.
***Operating Statistics* (*September*)**					
Output KWH—Total	Bill. KWH	33.4	391.6	10%	8%
Hydro-generated	"	7.4	—	5	—
Steam-generated	"	26.0	—	12	—
Capacity	Mill. KW	78.8	—	—	6
Peak Load (August)	"	66.9	—	8	—
Fuel Use: Coal	Mill. Tons	8.8	—	3	—
Gas	Mill. MCF	97.4	—	26	—
Oil	Mill. Bbls.	6.0	—	19	—
Coal Stocks	Mill. Tons	43.1	—	13	—
***Customers, Sales, Revenues, and Plant* (*August*)**					
KWH Sales—Residential	Bill. KWH	4.9	62	17	13
Commercial	"	4.5	47	12	10
Industrial	"	11.7	137	2	5
Total, Incl. Misc.	"	28.0	325	6	6
Customers—Residential	Mill.	30.7	—	4	—
Commercial	"	4.4	—	2	—
Industrial	"	.5	—	3	—
Total	"	37.9	—	4	—
***Income Account—Summary* (*August*)**					
Revenues—Residential	Mill. $	145	1,762	16	11
Commercial	"	115	1,278	11	9
Industrial	"	131	1,529	5	6
Total, Inc. Misc. Sales	"	433	5,026	10	8
Sales to Other Utilities	"	36	406	7	4
Misc. Income	"	9	218	9	8
Expenditures—Fuel	"	78	880	2	7
Labor	"	90	1,051	8	8
Misc. Expenses	"	72	816	5	1
Depreciation	"	42	493	8	7
Taxes	"	100	1,209	12	12
Interest	"	27	301	12	10
Amortization, etc.	"	6	14	D84	D38
Net Income	"	69	888	29	11
Pref. Div. (Est.)	"	10	123	5	6
Bal. for Common Stock (Est.)	"	59	765	37	13
Com. Div. (Est.)	"	50	554	13	7
Bal. to Sur. (Est.)	"	9	211	—	73
***Electric Utility Plant* (*August*)**	"	21,942	—	10	—
Reserve for Depreciation and Amort.	"	4,470	—	9	—
Net Electric Utility Plant	"	17,472	—	11	—
***Life Insurance Investments* (*January 1st-November 1st*)**					
Utility Bonds	"	—	716	—	23
Utility Stocks	"	—	61	—	42
Total	"	—	777	—	23
% of All Investments	"	—	9%	—	30

RECENT FINANCIAL DATA ON GAS COMPANY STOCKS

1951 Rev. (Mill.)			11/12/52 Price About	Dividend Rate	Approx. Yield	— Share Earnings* — Current Period	% Increase	12 Mos. Ended	Price-Earn.-Ratio	Div. Payout
		Pipelines								
$30	S	Mississippi Riv. Fuel	35	$2.20	6.3%	$3.27	D1%	Sept.	10.7	67%
47	S	Southern Nat. Gas	29	1.40	4.8	2.37	11	Sept.	12.2	59
76	O	Tenn. Gas Trans.	25	1.40	5.6	1.60	39	Sept.	15.6	88
84	O	Texas East. Trans.	19	1.00	5.3	1.76	D2	Dec.	10.8	57
40	O	Texas Gas Trans.	17	1.00	5.9	1.19	D30	Sept.	14.3	84
39	O	Transcontinental Gas	21	1.40	6.7	1.29	61	June	16.3	109
		Averages			5.8%				13.3	
		Integrated Companies								
98	S	American Natural Gas ..	31	$1.80	5.8%	$2.16	D19%	Sept.	14.4	83%
188	S	Columbia Gas System ...	14	.90	6.4	.87	D23	June	16.1	103
9	O	Commonwealth Gas	19	.25	1.3	.87	18	Dec.	—	29
8	C	Consol. Gas Util.	14	.75	5.4	1.42	D10	July	9.9	53
159	S	Consol. Nat. Gas	57	2.50	4.4	4.79	D5	June	11.9	52
62	S	El Paso Nat. Gas	36	1.60	4.4	2.87	2	Aug.	12.5	56
27	S	Equitable Gas	22	1.30	5.9	1.82	—	Sept.	12.1	71
13	O	Interstate Nat. Gas	40	2.50	6.3	3.27	1	Dec.	12.2	76
9	O	Kansas-Neb. Nat. Gas ..	20	1.24	6.2	2.11	36	Dec.	9.5	59
59	C	Lone Star Gas	27	1.40	5.2	1.50	D13	Sept.	18.0	93
11	O	Mountain Fuel Supply ..	19	.80	4.2	1.23	6	Sept.	15.4	65
42	C	National Fuel Gas	14	.80	5.7	1.28	6	Sept.	10.9	63
3	O	National Gas & Oil	7½	.60	8.0	.91	D12	Dec.	8.2	66
40	S	Northern Nat. Gas	41	1.80	4.4	2.62	17	June	15.6	69
25	C	Oklahoma Nat. Gas	36	2.00	5.6	2.78	D5	Aug.	12.9	72
19	C	Pacific Pub. Serv.	18	1.00	5.6	1.47	D34	Dec.	12.2	68
52	S	Panhandle East. P. L. ..	77	2.50	3.2	4.30	55	Sept.	17.9	58
8	O	Pennsylvania Gas	17	.80	4.7	1.81	20	Dec.	9.4	44
92	S	Peoples Gas Lt. & Coke ..	129	6.00	4.7	9.84	7	Sept.	13.2	62
17	O	Southern Union Gas	19	.80	4.2	1.06	D30	Dec.	17.9	76
3	O	Southwest Nat. Gas	8	.20	2.5	.62	51	June	—	32
126	S	United Gas Corp.	27	1.25	4.6	1.39	D14	June	19.4	72
		Averages			4.9%				13.5	
		Retail Distributors								
25	O	Atlanta Gas Light	22	$1.20	5.5%	$1.78	D11%	June	12.4	67%
44	S	Brooklyn Union Gas	25	1.50	6.0	2.13	2	Sept.	11.7	70
2	O	Chattanooga Gas	5	—	—	.30	30	June	16.7	—
2	O	Fall River Gas Works ..	33	1.00	3.0	1.65	10	July	20.0	60
5	O	Hartford Gas	36	2.00	5.6	2.39	D11	Dec.	15.1	84
9	O	Houston Nat. Gas	19	.80	4.2	1.22	NC	May	15.6	66
1	O	Jacksonville Gas	37	1.40	3.8	2.37	D52	Dec.	15.6	59
5	C	Kings County Ltg.	9½	.60	6.3	.94	40	Sept.	10.1	64
29	S	Laclede Gas	8½	.50	5.9	.73	D17	Aug.	11.6	68
19	O	Minneapolis Gas	23	1.10	4.8	1.32	D5	June	17.4	83
5	O	New Haven Gas Lt.	28	1.60	5.7	1.53	D20	Dec.	18.3	105
4	O	North Shore Gas	52	3.40	6.5	3.76	4	June	13.8	90
124	S	Pacific Lighting	52	3.00	5.8	4.30	22	Sept.	12.1	70
11	O	Portland Gas & Coke	19	.80	4.2	1.84	12	Sept.	10.3	43
2	C	Rio Grande Valley Gas ..	2½	.10	4.0	.19	—	Dec.	13.2	63
5	O	Seattle Gas	16	.80	5.0	1.21	D12	June	13.2	66
5	O	So. Jersey Gas	16	.50	3.1	.95	27	Sept.	16.8	53
5	O	Springfield Gas Light	32	1.60	5.0	1.63	—	Dec.	19.6	98
19	S	United Gas Improv.	34	1.55	4.6	2.06	1	Sept.	16.5	75
27	S	Wash. Gas Light	32	1.80	5.6	2.15	D3	Sept.	14.9	84
		Averages			5.1%				14.5	
		Canadian								
14	S	International Util.	30	$1.40	4.7%	$1.88	18%	Sept.	16.0	74%

RECENT FINANCIAL DATA ON TELEPHONE, TRANSIT, AND WATER COMPANIES

1951 Rev. (Mill.)			11/12/52 Price About	Dividend Rate	Approx. Yield	— Share Earnings* — Current Period	% Increase	12 Mos. Ended	Price-Earn.-Ratio	Div. Payout
		Communications Companies								
		Bell System								
$3,369	S	Am. Tel. & Tel. (Cons.)	156	$9.00	5.8%	$11.40**	D8%	Aug.	13.7	79
28	O	Cinn. & Sub. Bell Tel. ..	72	4.50	6.3	4.56	D1	Dec.	15.8	99
106	C	Mountain Sts. T. & T. ..	103	6.00	5.8	6.32	34	Sept.	16.3	95
203	C	New England Tel.	109	8.00	7.3	6.96	D29	Sept.	15.7	115
478	S	Pacific Tel. & Tel.	114	7.00	6.1	8.07**	D5	Aug.	14.1	87
62	O	So. New Eng. Tel.	33	1.80	5.5	1.88	D11	Dec.	17.6	96
		Averages			6.1%				15.5	
		Independents								
9	O	Central Telephone	12	$ .80	6.7%	$1.26	7%	June	9.5	63
85	S	General Telephone	33	2.00	6.1	3.38**	10	Sept.	9.8	59
11	C	Peninsular Tel.	44	2.50	5.7	3.54	D6	June	12.4	71
13	O	Rochester Tel.	13	.80	6.2	1.45	2	June	9.0	55
		Averages			6.2%				10.2	
		Transit Companies								
14	O	Cinn. St. Ry.	9	$ .25	2.8%	$ .32	68%	Dec.	—	94
9	O	Dallas Ry. & Term.	13½	1.40	10.4	2.46	40	Dec.	5.5	57
227	S	Greyhound Corp.	12	1.00	8.3	1.26	6	Sept.	9.6	80
22	O	Los Angeles Transit	9	.50	5.6	.70	55	Dec.	11.4	63
31	S	Nat. City Lines	13	1.00	7.7	1.91	—	Dec.	6.8	52
73	O	Philadelphia Transit ...	5	.80	16.0	Def.	—	xx	—	—
7	O	Rochester Transit	4	—	—	1.12	—	Dec.	3.6	—
26	O	St. Louis P. S. A	12½	1.00	8.0	.35	D15	Dec.	—	286
4	O	Syracuse Transit	17	2.00	11.8	1.75	D40	Dec.	9.7	116
24	O	United Transit	2½	—	—	.91	1	Aug.	—	—
		Averages			7.8%				8.7	
		Water Companies								
		Holding Companies								
26	S	Amer. Water Works ...	9	$ .50	5.6%	$ .67	D39%	June	13.4	75
4	O	N. Y. Water Service ..	44	.80	1.8	1.98	3	Sept.	22.2	40
		Operating Companies								
3	O	Bridgeport Hydraulic ..	29	$1.60	5.5%	$1.74	20	Dec.	16.7	92
8	O	Calif. Water Serv.	31	2.00	6.5	2.41	44	July	12.9	83
2	O	Elizabethtown Water ..	89	5.00	5.6	5.74	D18	Dec.	15.4	87
6	S	Hackensack Water	33	1.70	5.2	2.56	D6	Dec.	12.9	66
3	O	Jamaica Water Supply .	27	1.50	5.6	3.01	35	Sept.	9.0	50
3	O	New Haven Water	54	3.00	5.6	2.91	D10	Dec.	18.6	103
1	O	Ohio Water Service	23	1.50	6.5	1.76	D9	Sept.	13.1	85
5	O	Phila. & Sub. Water	49	1.00x	2.0	4.69	61	Dec.	10.4	21
1	O	Plainfield Union Wt. ...	53	3.00	5.7	4.09	D2	Dec.	13.0	73
2	O	San Jose Water	33	2.00	6.1	2.61	8	Sept.	12.6	77
6	O	Scranton-Spring Brook .	15	.90	6.0	1.20	20	June	12.5	75
3	O	Southern Cal. Water ...	10	.65	6.5	.65	D32	Sept.	15.4	100
3	O	West Va. Water Serv. ..	29	1.20	4.1	1.28	D2	Sept.	—	94
		Averages			5.5%				14.2	

C—Curb exchange. O—Over-counter or out-of-town exchange. S—New York Stock Exchange. D—Decrease. *Earnings are calculated on present number of shares outstanding, except as otherwise indicated. **On average shares outstanding. x—Stock dividend also paid in 1951. NC—Not comparable. xx—Deficit in the nine months ended September 30th.

What the State Commissioners Are Thinking About

Excerpts and digests from the opinions expressed in reports and addresses at the annual convention of the National Association of Railroad and Utilities Commissioners in Little Rock, Arkansas, from November 10th to 13th, 1952.

On Corporate Finance

"ALTHOUGH some utility managements have again turned to debt financing, perhaps influenced by current low interest rates and tax advantages, many of these have relied on debt financing only because inadequate earnings make it impossible to raise sufficient new capital in the form of equity. Most of us regulatory people are condoning higher debt ratios and ever-thinner equity components in the utilities' capital structures. Once again, as in the twenties, the desirability of high debt ratios is being argued on the basis that the payment of relatively low fixed charges on the debt portion of the capital structure permits higher returns to stockholders. Such 'trading-on-the-equity' is increasing in magnitude constantly, in disregard of yesterday's abuses and of the impact of heavy fixed charges on credit standing and financial stability. The financial dangers of high debt ratios, the importance of good service to the public, and the inevitability of service breakdowns following on the heels of financial breakdowns, have again become matters for serious reconsideration."

—*Report of Committee on Corporate Finance, Harold A. Scragg of Pennsylvania, chairman.*

A REVIVAL of sound financial practices is imperative, the more so because of the current inflationary trend. Gains which appear to be realized today from low interest rates and tax savings may prove to be illusory. Proper debt ratios should be determined, not on the basis of seeming savings, but by careful analyses of the relative risks and volatility, first, of the utilities as a whole compared with other branches of industry; second, of the various types of utilities; and third, of individual companies.

"It will be recalled that the late Joseph B. Eastman, Federal Co-ordinator of Transportation, counseled, 'Never incur debt unless absolutely necessary. Confine capitalization to common stock, so far as possible, and issue no more than need be of that.' Clearly, it is appropriate in these times."

—*Report of Committee on Corporate Finance, Harold A. Scragg of Pennsylvania, chairman.*

"TODAY, as in the twenties, a critical appraisal of utility financing practices is called for to insure the financial soundness of these essential institutions in future years.

Since the last war there has been a greater spread between the earnings of utilities and industry generally than existed previously and if this spread is to be continued through holding rates down to bare subsistence levels it is highly questionable if the public interest will be served in the long run.

"Similarly a wide gap has developed between general price, wage, and income levels and the level of utility rates. The commissions have been industrious in keeping rate increases to modest proportions—perhaps too much so—as is evidenced by many repeats in applications. What might have to be done ratewise in order that the utilities will continue to be able to obtain the new capital needed on reasonable terms will still be far below the increase in general prices. The assurance of the ability to raise capital is, of course, vital to the public interest."

—*Report of Committee on Corporate Finance, Harold A. Scragg of Pennsylvania, chairman.*

On Electric Rates

"AN industry-wide study of electric rates reveals, in the past year, a slight but definite trend upward. The recently negotiated contracts between the United Mine Workers and the mine operators augur an accelerated increase in rates for electric utilities generating their requirements with coal. With practically all such electric utilities, such additional costs for larger users have been passed on to the consumer through fuel clauses incorporated in the rates. However, having regard for the proportion of usage attributable to users not affected by such clauses it appears inevitable that rates for smaller users will have to be increased to cover such increased fuel costs along with the inescapable increase in labor costs resultant from settlement of the steel strike."

—*Report of Committee on Rates of Public Utilities, Paul E. Weiland of Ohio, chairman.*

On the Functions of Regulatory Commissions

"IN making a proper approach to the subject of rate fixing, we must not overlook the fact that a regulatory body is a trustee for the public and, as such, is not free to deal generously with a public utility at the expense of the ratepayer. To do so would violate the trust reposed in the regulatory body. Of course, it is the duty of the regulatory body to see to it that the *constitutional and statutory rights of the public utility are protected.* Also, it must be kept in mind that a public utility *is performing a function of the state* (Smyth *v.* Ames, 169 US 466, 544, 42 L ed 819, 848; Western Canal Co. *v.* Railroad Commission, 216 Cal 639, 647) and that a public utility exercises an extraordinary privilege and occupies a privileged position. (United Fuel Gas Co. *v.* Kentucky R. Commission 278 US 300, 309 [PUR 1929A, 433] 73 L ed 390, 396.)"

—EVERETT C. MCKEAGE,
Chief counsel, California Public Utilities Commission.

On the "Preference Clause"

"THE present Federal laws create a ridiculous and anomalous situation, under which a utility company, subject to regulation *under state law,* is required *by Federal law,* to bargain away, by contract with a Federal agency, the state's jurisdiction to regulate the rates of that company, merely because it is a purchaser of Federal power.

"Federal power projects are costing all the taxpayers of the nation hundreds of millions of dollars. These developments are tax free and have all the low interest credit and borrowing power of the Federal government behind them. The existing discrimination is the more apparent, not only because of the fact that many of the preference agencies are not subject to state commission regulation, but also because of the fact that most of them are free from the tax burdens which the regulated utilities, and their customers, must pay. All citizens should have the right to obtain government power from Federal projects on an equal basis and without discrimination; without depriving the states of their regulatory jurisdiction; and in accordance with the requirements of public convenience and necessity, and not on the basis of ideologies imposed by law."

—H. N. BEAMER,
President, Idaho Public Utilities Commission.

"IT is frequently said that the Federal power preference statutes had their origin in an early Reclamation Act of April 16, 1906, and are therefore an established and unchangeable principle in the Federal government's re-

source development program. Such a statement is absolutely false. The preference clauses, as they exist today, had their origin in the Tennessee Valley Authority Act of 1933, and were one of the several vehicles without which the socialization of the electric industry in the TVA area could not have been accomplished.

"The act of 1906 merely provided that whenever a development of power was necessary for the irrigation of lands, the Secretary of the Interior was authorized to lease any surplus power or power privileges, *'giving preference to municipal purposes.'* The same wording, 'giving preference to municipal purposes,' was used in subsequent acts in 1911, and even as late as 1922.

"It is very plain that such a preference was based upon the *use* of power, and is in favor of the power *user*. It was, in fact, limited to *municipalities* as *consumers* of electric power for municipal purposes, such as the lighting of streets and public buildings, pumping of water for fire protection and municipal water systems, and similar municipal purposes, as distinguished from the proprietary business of selling power to the public for general use. It was *not* a preference based upon *the type of agency* which distributes power to the actual consumer."

—H. N. BEAMER,
President, Idaho Public Utilities Commission.

"BUREAUCRATIC administration has extended the preference provisions so as to virtually exclude the customers of regulated electric companies from effective participation in supply of power from Federal plants, except in a few cases where the pressure of public opinion, aided by commission action, has forced an opposite result. Federal power installations in the Northwest have been operated under policies and practices which, if engaged in by any power supplier other than agencies of the Federal government itself, would be in outright violation of state and Federal regulatory statutes prohibiting discrimination, and may well be considered as combinations and conspiracies in restraint of commerce and trade under existing laws."

—H. N. BEAMER,
President, Idaho Public Utilities Commission.

On Public Relations

"THE survey indicates that virtually all the larger utilities recognize the value of good public relations, and are actively pursuing a program designed to cultivate the good will of utility customers and the public generally. Most programs include some advertising, in newspapers, on the radio or television, or through the utility's own publications. Many gas and electric utilities sponsor demonstration classes to publicize certain types of appliances, while all types of utilities may have 'Open House' to show their customers the equipment used to provide service. Some utilities still provide small amounts of free service for adjusting appliances, although the extensive free service, which was quite common in prior years, has been gradually but consistently curtailed.

"The type of program indicated above has a great deal of merit, but it is not very effective unless the utility provides good, continuous service at acceptable standards, and unless the utility personnel is unvaryingly courteous in its dealings with the public. One discourteous employee can nullify a lot of back-breaking effort expended by the company in promoting its public relations. Here, again, it should be noted that the small utilities are at a decided disadvantage in promoting an orthodox public relations program, since they cannot afford to retain an expert to direct such a plan. However, there is no reason why the management cannot instill in its employees the importance of being courteous to the public. The fundamental ingredients of a good public relations program are available even to the smallest utility, if it but has the desire and will to use them."

—Report of Committee on Service and Facilities and Safety of Operation of Public Utilities, Frank Harper of Maryland, chairman.

On the Railroad Passenger Deficit Problem

"THE large and continuing deficits incurred by the railroads from the operation of passenger train service constitute the railroad industry's most serious problem today—a problem which is of paramount importance to the members of this association and to the general public. Railroad earnings are being adversely affected, the users of freight service are already being forced to bear some of the burden of passenger losses, and if the trend toward increasing passenger deficits is continued unabated, the ability of the railroads as a privately owned industry to continue providing necessary freight and passenger service to the public, either under normal conditions or in times of emergency, will be seriously jeopardized."

—Report of Special Committee on Co-operation with the ICC in the Study of the Railroad Passenger Deficit Problem, Walter R. McDonald of Georgia, chairman.

On Rate Base Determination

"COMPOSITION *of Rate Base.* A rate base consisting of depreciated original cost, or net investment, plus materials and supplies and cash working capital still receives exclusive, or substantial, weight in most final determinations. Construction work in progress may be included where the company does not capitalize interest related to it, or where the interest is treated as revenue. Property held for future use may be included if the evidence shows that the company exercised proper foresight in the purchase; otherwise, it may be excluded. There is some diversity of opinion as to the inclusion of cash working capital, with a growing trend toward exclusion where readily available company funds are sufficient to bridge the gap between rendition of, and payment for, service."

—Report of Committee on Progress in the Regulation of Public Utilities, Benjamin F. Feinberg, chairman.

On the Reasonableness of Utility Rates

"THE courts have said that anything less than a reasonable or fair return on the investment of a public utility is a confiscatory return and is, therefore, unlawful. In the development of this principle, the Supreme Court of the United States . . . boiled the matter down to 'just compensation' for the taking or the use of the property of the public utility reasonably devoted to the public. Therefore, 'just compensation' and a 'reasonable or fair return' became synonymous.

"The position taken by the public utilities, in connection with this phase of the subject, was that the reasonable or fair return to which the courts referred was a return that was just barely enough to avoid the line of confiscation and that, in fairness, the utility should be entitled to something more than just the nonconfiscatory return. . . . To me, this view regarding a rate of return appears very anomalous indeed and the reasoning brought forward to support it is illogical and tortured. The legal history leading up to the situation . . . shows an inconsistency which appears to condemn any contention that a public utility is entitled to more than a nonconfiscatory rate of return."

—EVERETT C. MCKEAGE,
Chief counsel, California Public Utilities Commission.

On Regulatory Lag

"APPLICANT companies can make substantial contributions toward the alleviation of conditions of which they complain. With continued and progressive inflation since the close of World War II, utilities should maintain their books and records on a preparedness basis to eliminate avoidable delay in the preparation of required testimony and exhibits for a rate revision application. Companies budgeting expansion programs for some years in the future, and budgeting expenses for at least a year in the future, can, in most instances, foresee with a reasonable degree of accuracy their revenue requirements. The avoidance of undue delay in the filing of a rate application is the responsibility of the applicant company."

—Report of Committee on Rates of Public Utilities, Paul E. Weiland of Ohio, chairman.

"MUCH of the criticism against the so-called 'regulatory lag' in the period from 1920 to 1940 was due to an attempt to follow supposed requirements laid down by then current decisions of the United States Supreme Court and other courts. See Smith *v.* Illinois Bell Teleph. Co. (1926) 270 US 587, 591 [PUR1926C 754], where it was noted that the case had for a period of two years remained practically dormant. Since then there has been the decision in the Hope Case (320 US 591, 51 PUR NS 193) and other cases which adopt a more liberal view regarding rate-making procedures. It would seem that regulatory commissions now have more freedom to adopt procedures which would have the effect of streamlining rate-making processes so long as they meet the test of the reasonable end result.

"It is submitted that any real gains in accelerating the regulatory process must be attained by adopting this approach rather than to adopt the 'stop gap' of a temporary rate or the permitting of a rate to go into effect under bond, which is unsatisfactory due to difficulties in making refunds."

—WILLIAM E. TORKELSON,
Chief counsel, Wisconsin Public Service Commission.

"THE public utilities themselves should be vitally concerned in the adequate financing and staffing of regulatory agencies. The strong lobbies that are maintained by utilities have not made any effort to support adequate appropriations for regulatory purposes. In the

long run, they pay for this shortsighted policy by long delays which must always result when the regulatory agency is overburdened with work and understaffed as most of our commissions are.

Public utilities should be interested in strong, efficient regulatory bodies if they are to receive fair and prompt treatment rather than arbitrary or political decisions."

—RICHARD A. MACK,
Chairman, Florida Railroad and Public Utilities Commission.

Resolution Favoring Amendments to the Federal Power Act

"RESOLVED, That this association favors the enactment of legislation amending the Federal Power Act as may be necessary to insure that there shall be no hiatus between or duplication of Federal regulation and state regulation, and as may otherwise be necessary in the public interest.

"Resolved Further, That the committee on legislation and the legal representatives of this association are directed to draft the necessary amendments, to refer such amendments to the state commissions, and to submit the amendments for approval by the executive committee; and upon approval by the executive committee, the committee on legislation and the legal representatives are authorized and directed to arrange for the introduction of a bill in the 83rd Congress proposing such amendments, and are authorized to appear on behalf of the association before any committee of Congress at any hearing which may be hereafter held upon legislation pertaining to the above matters for the purpose of presenting the views of the association."

Resolution Favoring Amendments to the Natural Gas Act

"RESOLVED, That the National Association of Railroad and Utilities Commissioners favors the enactment of legislation to amend the Natural Gas Act, as follows:

"(a) Section 1 of the Natural Gas Act (15 USC 717a), as amended, is amended by adding thereto a subsection (c), as follows:

"(c) The provisions of this act shall not apply to a person engaged in or legally authorized to engage in the local distribution of natural gas because of such person's ownership or operation of facilities used or to be used to transport, whether or not in interstate commerce, natural gas received by such person within or at the border of a state to points of consumption within such state: *Provided However,* That this subsection shall be operative only if none of such facilities is used or to be used for or in connection with the sale of natural gas in interstate commerce for resale or for or in connection with the transportation of natural gas in interstate commerce for hire: *Provided Further,* That the transportation of gas owned jointly or severally by two or more such persons through such a facility or facilities owned and operated singly or jointly by one or more of such persons, with or without charge, shall not be deemed transportation of natural gas in interstate commerce for hire within the meaning of the foregoing proviso, if such facility or facilities do not extend beyond a single metropolitan area and if all gas delivered or transported through such facility or facilities is ultimately consumed within such metropolitan area . . ."

Resolution on Relocation of Utility Facilities

"WHEREAS, In these times of constantly increasing cost and even higher taxes, regulatory commissions are especially concerned over increased operating costs of utilities that necessitate higher rates to the users of such service; now, therefore, be it

"Resolved, That the National Association of Railroad and Utilities Commissioners is of the opinion that the existing discrimination against nonrailroad utilities should be eliminated and that equal treatment should be accorded all utilities having facilities involved in Federal-aid highway projects, and

"Resolved Further, That the committee on legislation and the legal representatives of this association are authorized to appear on behalf of the association before any committee of Congress at any hearing which may be hereafter held upon legislation pertaining to the above matter for the purpose of presenting the views of this association."

WHAT THE STATE COMMISSIONERS ARE THINKING ABOUT

Resolution on Taxes

"RESOLVED, That the National Association of Railroad and Utilities Commissioners is of the opinion that the present excise taxes on transportation and communication services are inimical to the maintenance of a reasonably priced and nondiscriminatory public transportation and communication services and that, accordingly, the excise taxes on transportation and communication services should be repealed or greatly reduced; and

"*Resolved Further,* That the special tax committee, the committee on legislation, and the legal officers of the association are hereby authorized to appear on behalf of the National Association of Railroad and Utilities Commissioners at any hearing before any committee of Congress which may be held to consider any legislation looking toward revision of excise taxes on transportation and communication services, for the purpose of making a statement in support of the views herein expressed."

On Retention of State Powers

"THE United States Supreme Court's decision in the steel industry seizure case, with its denial that the Federal government has inherent or residual powers, gives reason to believe that the future will see less Federal encroachment upon state regulatory agencies. However, one field in which such encroachment is being initiated is the state regulation of small telephone companies that obtain REA loans.

"Section 202 of Title II of the REA Act of 1936, as amended, reads in part: '. . . nothing in this act shall be construed to deprive any state commission, board, or agency of jurisdiction, under any state law, now or hereafter effective, to regulate telephone service. . . .' Despite this statutory limitation, certain provisions of the REA notes, mortgages, and loan contracts could be construed as depriving the state commission of its powers and duties to regulate a borrowing company's rates, services, and facilities. In other respects, the REA loan requirements, if that agency administered them harshly, might become extremely burdensome to the company. . . . It seems that both the telephone companies and the state commissions will do well to examine carefully all REA loan agreements before entering into or approving them."

—*Report of Committee on Progress in the Regulation of Public Utilities, Benjamin F. Feinberg, chairman.*

On the Small Telephone Company

"SUCCESSFUL operation of telephone companies serving 300 or less subscribers has about come to an end. There is a movement under way to consolidate small uneconomical companies to make possible full-time management and control, sound financial structure, and good service with modern plant at compensatory rates. Necessary modernization and growth in small companies can no longer be financed out of earnings or reduced wages. State commissions and their staffs should encourage integration of small telephone companies in the individual states. Rate adjustment is an essential element in the success. Short-term loans are available through equipment manufacturers and local banks to be used for improving plant, service, and financial structure. Modernization will have to be done at high prices and money will cost more because of the limited size of the business and greater risk involved."

—*Summary excerpt from "The Future of the Small Telephone Company" by William E. Roby, Indiana Public Service Commission, contained in Report of the Committee on Engineering, George P. Steinmetz of Wisconsin, chairman.*

On Standards of Utility Service

"IN general, the larger utilities recognize the value of providing good service, and with few exceptions the state commissions answering our inquiries stated that the utilities under their jurisdiction were providing good to excellent service. It would manifestly be unfair to make any generalization comparing the size of individual utilities with the type of service, but it appears that on the average, the type of service rendered by small utilities is somewhat below the standards maintained by the larger utilities."

—*Report of Committee on Service and Facilities and Safety of Operation of Public Utilities, Frank Harper of Maryland, chairman.*

On Transit Problems

"In order to meet the problem of rising costs and decreasing traffic the transit industry, whether privately or publicly owned, has made some progress. The electric railway, which rose, flourished, and all but disappeared in the West within a period of fifty years, has been replaced by busses and trolley coaches due principally to their more economic operation and maintenance and facility in shifting or extending to areas of new demand for service. This transformation not only has reduced costs but reduced investment as well and at the same time enabled the carrier to perform more service. Likewise, it enables the carrier to more closely tailor service to the rapidly changing traffic demand. Coaches of new and more modern design have incorporated new standards of comfort, facility, and safety. Despite nostalgia for the passing electric car, the aggregate result is good as far as it goes. This is particularly true in rapidly growing and expanding cities of the West where traffic patterns are not so firmly fixed as in most older cities . . ."

—Kenneth Potter,
Member, California Public Utilities Commission.

On Valuation

"The committee on valuation does not suggest that the association go on record as advocating or disapproving the policy of projecting valuations to include future plant expenditures. It does suggest that if such a practice is to be followed by any commission great care should be taken to include only such construction projects as are presently and urgently needed for continuing dependable service and which are to be begun within the immediate future, and then only on a basis that resolves all doubts in favor of the public interest. A long-established policy such as that of including in the rate base only property which is, on the valuation date, actually used and useful for the public should not be lightly discarded, and if it is to be modified such modification should be carefully restricted so as to fully protect the public interest."

—Report of Committee on Valuation, Samuel Bryan of Wisconsin, chairman.

On Valuation for Motor Carrier Regulation

"Obviously, it is unsound to hold that because a fleet of vehicles has reached a point in the scale of depreciation at which wholesale replacement is necessary, the company should be allowed to earn a return only on the small remnant of undepreciated value remaining in its fleet at the valuation date. To continue its operation it must replace its vehicles and within a few months, perhaps, a complete new fleet will be in use, making wholly inapplicable a valuation and rate schedule made only a few weeks before. Such fluctuations in rate base and resulting rates would be unsatisfactory both to the carriers and to the public patrons. The interests of both are best served by reasonable stability in the rate structure and level. It is suggested that it would be practical and equitable to use an average original cost less depreciation value arrived at by taking an average net cost for a period of years approximating the average life in service of the vehicles used. . . .

"In some states there has been legislation which directs the regulating agency to give controlling weight to the operating ratio as the measure of the reasonableness of a rate level for motor carriers. This tendency toward the adoption of arbitrarily fixed operating ratio as the sole criterion of reasonableness of motor carrier rates should be discouraged, because that method has many undesirable features.

"If some method of stabilizing the rate base such as outlined above can be used, while at the same time consideration is given to increasing the rate of return as the operating ratio under which it is earned increases, it may be possible to stem the pressure for legislation making the operating ratio the sole criterion in rate determination. This would retain the principle of a rate of return on a reasonably normal valuation level as it may be affected by the cost of money, even though it would be modified to a limited extent as the operating ratio increases. If and when a stable condition is reached in either or both the traffic level and the wage and price level, then a rate structure can be premised on a higher operating ratio than is practical under conditions prevailing at this time. However, if a definite operating ratio is fixed by legislation under current conditions, it may be difficult to bring about appropriate changes when conditions become more stable.

"The above suggestions are not intended to bind the association to any particular policy, but are presented with the thought that they may be helpful to member commissions in adjusting the valuable original cost less depreciation concept of valuation to the problems of motor carrier regulation."

—Report of Committee on Valuation, Samuel Bryan of Wisconsin, chairman.

The March of Events

In General

NARUC Convention

A SUCCESSFUL and well-attended convention at the Hotel Marion, Little Rock, Arkansas, marked the sixty-fourth annual meeting of the National Association of Railroad and Utilities Commissioners.

Discussions of leading speakers and reports are to be found in the feature "What the State Commissioners Are Thinking About," page 864.

The convention elected Eugene S. Loughlin, chairman of the Connecticut commission, as its president for the forthcoming year, succeeding J. C. Darby of South Carolina. C. L. "Roy" Doherty, chairman of the South Dakota commission, was elected first vice president and W. F. Whitney, of the Wisconsin commission, second vice president.

New York city was chosen for the 1953 meeting, time to be fixed later.

Plan to Harness Missouri Told

THE Missouri Basin Inter-Agency Committee recently revealed detailed long-range plans for harnessing the Missouri river and controlling its destructive floods at an estimated total cost of $9.4 billion.

The vast program, calling for four main-stem dams, hundreds of miles of levees, and irrigation and hydroelectric developments, was set forth in a new booklet published by the committee.

The committee said some projects have been completed or are well under way, but did not give a target date for completion of the entire project. Authorized by the Federal Control Act of 1944 and subsequent legislation, the basin development program will benefit the states of Colorado, Kansas, Missouri, Montana, Nebraska, North Dakota, South Dakota, Wyoming, Iowa, and Minnesota.

Arkansas

Agency Lacks Exclusive Power

A PRECEDENT-SETTING opinion handed down by the state supreme court on November 10th held that the State Oil and Gas Commission does not have exclusive jurisdiction over oil and gas production.

The commission itself was not even a party to the suit, in which the high state tribunal asserted that the state legislature, in establishing the agency, did not intend to grant it exclusive jurisdiction on oil and gas matters. The opinion was written by Associate Justice Millwee.

Louisiana

Rate Ruling Reversed

A RECENT district court decision that denied a 20 per cent rate increase to Gulf States Utilities Company was reversed by the state supreme court in New Orleans last month.

The supreme court's decision apparently permits the utility company to

increase its prices 20 per cent. Legal action on the appeal resulted from a district court ruling in Baton Rouge in July that denied the rate increase. The case was first taken to court after the state public service commission refused the increase in a February hearing at Baton Rouge.

The commission ruling was upheld by District Judge G. Caldwell Herget on July 18th. In dismissing the suit, Herget said the complaints of the company were that the commission took into consideration the returns received by Gulf States from the Esso Standard Oil Company and Ethyl Corporation plants. The commission, the company attorneys argued, should not have considered this return because it was "one of a private nature."

Minnesota

Proposed Utility Tax Debated

A PROPOSED act enabling cities to impose a tax on the gross receipts of public utilities was debated recently by representatives of the seven largest cities in Minnesota, meeting in Minneapolis.

Text of the proposed tax was prepared by the League of Minnesota Municipalities for consideration by the revenue committee of the state's cities of the first and second class, which include Minneapolis, St. Paul, Duluth, Austin, Rochester, St. Cloud, and Winona.

Representatives of cities owning their own utilities, particularly Austin, complained that under the wording of the proposal which prohibits taxing of receipts from sale of services outside corporate limits would cut into their revenues.

Austin now imposes a 10 per cent gross revenue tax on all users of its municipal power, whether inside the city or not.

The committee finally adopted a resolution favoring the legislation, with the proviso that it should not affect existing tax structures.

New York

Transit Power Bill Increased

NEW rate schedules increasing the power bills of the city subway and elevated lines by $2,600,000 a year—or 27 per cent above their present $7,000,000—were filed recently by the Consolidated Edison Company with the state public service commission.

The company's action, disclosed by the commission in Albany, came in the midst of drawn-out negotiations between the utility and a 3-man city committee. The increase was to take effect automatically on November 16th, unless modified by a future agreement with the city or unless halted by the state commission pending an investigation on the ground the rise might be excessive.

North Dakota

Will Not Oppose Oil Industry Regulation

TWO public service commissioners said recently they would not oppose, but at the same time won't invite regulation of the state's infant oil industry by the commission.

Proposals have been made that regulation of the industry should be taken away from the Industrial Commission—composed of the governor, attorney general, and commissioner of agriculture and labor—and placed under the state commission or some separate commission.

Commissioners E. H. Brant and

Ernest Nelson both said they would not seek such a transfer to their commission.

"We have enough headaches now," Brant said.

At the same time, Brant added, he does feel the Industrial Commission may not be the proper body to handle oil regulation. Nelson said many states have the public service commission or a similar agency in charge of oil regulation and that it seems to have "worked out very successfully."

Pennsylvania

Asks Gas Rate Raise

THE 200,000 customers of The Peoples Natural Gas Company in the Pittsburgh district were recently reported faced with the prospect of a $1,500,000 annual increase in their gas bills. The utility firm asked the commission to approve the raise in rates last month, explaining that the increase was made necessary by a rise in the wholesale cost of gas which it purchases from Texas Eastern Transmission Corporation.

The pipeline firm was granted a $26,180,000 increase by the Federal Power Commission on November 13th.

The Peoples' increase would be in addition to a $2,700,000 rate increase authorized by the commission on a temporary basis last June 15th. The increase, which has been the subject of numerous hearings, is opposed by the city of Pittsburgh. In its application the firm asked that the rate increase go into effect December 1st.

Utility Laws Face Attack

STATE laws under which Pittsburgh trolley, gas, and light companies have asked for rate increases will be attacked at the 1953 session of the state legislature, it was reported recently. The attack will be led by Philadelphia interests, which contend it is basically wrong to permit utilities to tie their rate applications to inflated values.

The question was raised by Philadelphia Special Deputy City Solicitor Harold E. Kohn in a case in which the Philadelphia Transportation Company is seeking higher fares.

Present laws, he asserted, allow the company to fix its value at the figure which it would cost to replace all physical properties—including trolleys, tracks, barns, and the like—at current high prices.

The state public utility commission uses reproduction cost as a principal factor in determining rates.

Washington

PUD Rate Boost Opposition Explained

V. M. CLEAVELAND, manager of the Clark County Public Utility District, in a recent communication explained the opposition of the district to a proposed 3 to 5½ per cent tax on the district by the city of Vancouver. Cleaveland explained to the city council of Vancouver that the district did not want to lose the rate advantage enjoyed by Vancouver over Portland which would be wiped out if the tax were imposed.

He also pointed out that low cost of electricity has a "definite tendency to hold down the cost of other forms of energy."

After reciting other advantages of low-cost energy furnished by the PUD, Cleaveland said its greatest fear was that the tax would tend to increase if once established.

Cleaveland was erroneously reported as saying that the district was opposed to any increase in electric rates for any reason whatever (PUBLIC UTILITIES FORTNIGHTLY, November 6, 1952, page 741).

Progress of Regulation

Concern Expressed over Rising Labor Costs Causing Rate Increases

A TELEPHONE company earning a return of 6.01 per cent was denied a rate increase by the Alabama commission despite a previous ruling by the state supreme court that the company was entitled to a return of 6⅔ per cent on its net investment. Not only was the return fixed by the supreme court higher than in any other southeastern state, but also the company's debt ratio was only about 23 per cent. Such a debt ratio increases earnings requirements, since equity capital is more costly than debt capital. With a debt ratio of 33⅓ per cent, which the company conceded to be reasonable, existing rates would be adequate, the commission concluded.

The commission recognized that if the company is to maintain the confidence of the investing public, it must earn not only current dividends but also an amount for surplus sufficient to assure continuity of dividends in less profitable years. The commission, however, did not believe the public should be burdened with rates over those necessary to yield such a surplus.

The petition for a rate increase was predicated upon a general wage increase granted as a result of arbitration. The commission expressed alarm over rising labor costs in view of its duty to fix rates which shall be just and reasonable to both the utility and the public. Labor costs represent over 50 per cent of the company's total operating costs. The state supreme court has fixed the minimum amount the company is entitled to earn and has noted that wages fall within the province of management. Recognizing that labor has been properly represented by attorneys, economists, and officers proficient in presenting labor's views, the commission said:

> The end result increasingly has approached the possibility, and it may well be that utility rates, in the final analysis, are being determined not by the statutory designated public service commissioners, but by the rate of return and rate base factors fixed by the supreme court and by arbitrators acting on behalf of management and the union without responsibility to the general public for the results of their decisions. Already, the scope of effective rate regulation in Alabama has been shrunk to dwarf proportions and restricted possibilities.

The commission judged the company's earnings on the basis of the relation of net operating income to average net investment. It preferred average net investment to investment as of a particular date. Property held for future use was deducted from the rate base since it was not being held for imminent use. It was scheduled for use in eight years. Furthermore, the commission concluded, the company could not project definite plans for its use under these circumstances.

Cash working capital and materials and supplies were also excluded from the rate base because the amounts claimed for these items were offset by funds pro-

vided through the net accrued taxes.

The depressing effect of high construction costs was not considered in determining the company's earnings requirements. An allowance for such costs would be predicated upon speculation into the future. It would particularly involve prediction of future economic conditions and future levels of construction activities. The commission believed that such predictions could not be made with reasonable accuracy. *Re Southern Bell Teleph. & Teleg. Co. Docket No. 13175, October 17, 1952.*

Commission Seeks Method of Eliminating Apportionment of Transit Property, Revenues, and Expenses

The Maryland commission authorized the Capital Transit Company to increase fares from 7 to 10 cents in the first zone where, even after this increase was made effective, the company would still operate at a loss.

The commission conceded that there might be some difference of opinion with respect to the apportionment of at least some of the items of expense between the company's Maryland and District of Columbia operations but pointed out that regardless of the method of apportionment, the company's substantial deficit would not be absorbed to the point where some return would be produced.

The commission, in approving an increase in the school fare to 10 cents for the first zone, said that in view of the facts and the law it had no alternative. But the commission added:

> The commission is especially reluctant to see the school fare for the first zone increased to 10 cents, particularly in view of the abnormally low school fare in the District of Columbia, which remains 3 cents under an act of Congress enacted many years ago and which, despite repeated efforts to have it changed to something more nearly representing a reasonable fare in the light of present conditions and costs, has continued at the same level set by Congress more than twenty years ago. The school child riding in a Maryland zone of about a mile and a half will be required to pay 10 cents, as against a charge of 3 cents for a ride of possibly several times this distance within the District of Columbia.

The commission expressed the hope that some means might be effected for considering Capital Transit's property and affairs as a whole and not on the segregated basis now being used. If this is not done, the commission feared, there would be a continued whittling away of Maryland service and perhaps higher fares. *Re Capital Transit Co. Case No. 5250, Order No. 49500, October 2, 1952.*

Electric Rates Based on Cost of Capital

The Connecticut commission granted a rate increase to an electric company required to expand its generating and distributing system to meet the increased demand for service. It is the first general rate increase for the company in the past thirty years. In fact, the company has reduced rates over that period.

Debt capital will comprise about 47 per cent of the company's capitalization; preferred stock 12 per cent; and common stock and surplus about 41 per cent. The commission concluded that the company could reasonably finance its additions and improvements and also obtain a reasonable return on its property with an allowance of about 6.23 per cent.

Because of the nature of the regulated utility industry, only a small portion of the funds necessary to expand plant comes from internal sources, such as reinvestment of depreciation accruals and income transferred to surplus. In noting this, the commission said the company's

earnings must be sufficient to enable it to obtain new capital on reasonable terms. It devoted particular attention to common stock money. It said that it would be a misdirected public service if the financing costs were kept at an extremely low level only by the exaction of rates so high, or by the maintenance of a capital structure so unbalanced, as to be in itself an unfair burden.

A fair rate of return should be measured by what is needed to attract and maintain a financial structure which appears, *prima facie* at least, not unreasonable. The commission said its duty was to keep the cost of this financing program at as low a level as possible, just like every other cost. In this connection it held that the reasonableness of the return is measured, as one criterion, by the historical and current cost of money. A cost of debt capital at 3 per cent, preferred stock at 4.12 per cent, and common stock at 8.5 per cent was deemed reasonable.

The proposed rates included a revision in the fuel adjustment clause to apply to all sales instead of to industrial and some commercial sales as at present. The cost of fuel was considered one of the necessary out-of-pocket costs borne by the company which should be recouped from its customers. This feature of the schedule was approved on the ground that the cost of fuel is properly chargeable against residential and all commercial classes of customers as well as against those currently affected.

The schedule also provided for the imposition of a fuel adjustment charge on street lighting. This was disapproved. Fuel adjustment is applied only to the energy charge. Since the energy portion is a minor part of the total charges for street lighting, and since all of the energy is estimated, the commission concluded that there was no sufficient basis to authorize the exaction of a fuel adjustment from the street-lighting business. *Re Hartford Electric Light Co. Docket No. 8687, October 10, 1952.*

Reproduction Cost Should Be Based upon Average Prices Rather Than Spot Prices

The superior court of Pennsylvania reversed an order disallowing a proposed electric rate increase but authorizing a smaller increase. The court remanded the record to the commission to take additional testimony and make additional findings since the commission was held to have acted improperly in rejecting 10-year average prices in estimating reproduction cost as one of the elements of fair value.

After stating that the rate base in Pennsylvania is fair value, the court said that among the measures of value to be considered are original cost and reproduction cost based upon the fair average price of materials, property, and labor. The weight to be given any particular measure of value is for the commission, but its action must be within the area of its administrative discretion and supported by the evidence, according to the court.

The obvious purpose of the requirement of "fair average prices" is to avoid the use of the high or the low prices over a given period, and in this way to arrive at a valuation that is fair to both the utility and the consumer. The commission had rejected reproduction cost figures based on 10-year averages because the recent trend of prices had been upward.

The court held that such a reason was not valid, since it was in direct conflict with the purpose underlying the use of such averages. Consequently, the court believed that the commission should be given an opportunity to exercise its administrative discretion on all the admissible evidence.

The electric company held large tracts of coal lands under lease-purchase agreements. These leases provided for payment for the coal, as mined, on an annual royalty basis. The commission had allowed these annual payments to be capitalized and had included them in the rate

base. The court held that the commission erred in this respect.

The royalty payments were charged by the company as an operating expense under fuel cost. The court held that amounts which are charged to operating expenses cannot be capitalized and included in the rate base. Coal lands which were owned and operated by the company were, however, properly included in the rate base. The acquisition of such mines by the company was deemed justified in order to assure a continuous supply of coal.

The company argued that the commission's allowance for annual depreciation failed to accumulate enough money to produce replacement for the property retired, and that annual depreciation should be based upon replacement costs at current prices. The commission was held to have properly calculated annual depreciation allowance to permit the company to recover the original cost of its property.

The use of current prices as the basis for estimating annual depreciation was considered unsound, since changing price levels would require variations of the annual accrual. Furthermore, the adoption of the company's contention would require the ratepayers to provide in effect, in periods of rising prices, capital contributions and thus sustain alone the effects of inflation. *City of Pittsburgh v. Public Utility Commission, 90 A2d 607.*

Commission May Not Impose Conditions upon Municipal Acquisition of Water Utility Properties

THE New York commission, in authorizing a water company to transfer its franchises, works, and system to a municipality, refused to impose rate and service conditions, as requested by one of the towns served by the company. The Public Service Law expressly exempts municipal water plants from the commission's jurisdiction. The commission would have no jurisdiction over service or rates after the transfer has been made. A provision that the city should continue to supply water to consumers living in the near-by towns would be a meaningless gesture.

Furthermore, if the commission were to withhold its approval until binding long-term contracts as to rates and services were entered into between the municipality and the officials of the adjacent towns, the proposed sale, with its fixed closing date, might collapse. The commission deemed it improbable that the city would pay thousands of dollars for a water distribution system in a near-by town without availing itself of the privilege of selling water there. This would be its only means of returning and amortizing its investment.

The sale price agreed upon was original cost of property to be transferred plus accrued depreciation, as determined under the rules of the commission. It was decided that, in the light of the present-day level of construction costs, such sale price was reasonable and not excessive.

Discussing the reasonableness of the price to be paid, the commission said:

> Inquiry into the question of public interest in the sale of a waterworks plant by a private company to a municipality normally revolves around the question of price. This is true because there is wide acceptance of the benefits accruing to a municipality through the ownership and control of a service so vital to the health and protection of its citizens. The problems of public health, sanitation, and fire protection are so intricately entwined with normal functions of government that few are the remaining cities in this state which are dependent upon private companies for their supply of water. The onerous character of high income taxes upon the financing and operation of privately owned water systems has enhanced the benefits flowing from public ownership of water utilities which custom and past experience indi-

cate are readily adaptable to municipal operation and development.

Both the city acquiring the water properties and the consumers in the adjacent towns have been engaged for many years in a fruitless struggle to obtain an improved water supply. Consummation of the sale would mark a long forward step towards the successful culmination of that objective. This was considered equally beneficial to the adjacent towns as well as to the purchasing municipality. *Re Renssalaer Water Co. Case 15906, August 12, 1952.*

Automatic Application of Purchased Gas Adjustment Clause Disapproved

THE New Jersey Board of Public Utility Commissioners directed a gas company to withdraw and refile a tariff providing for a purchased gas adjustment in the event that the company's supplier should receive a rate increase from the Federal Power Commission. The proposed adjustment would have been effective automatically in the event that the cost of purchased gas increased.

The board made the following general comment on the matter:

> Tariff provisions of the type here under consideration, usually designated "Fuel Adjustment Clause," have been generally recognized by regulatory agencies for many years. They have proven to be practical and reasonable for the purpose of reflecting in charges for utility service uncontrollable changes in cost of basic materials used in producing the service.

The first question which the board considered was whether the company could reasonably be required to absorb an increase in the cost of purchased gas without receiving a rate increase. The board concluded that since the company was receiving only a 4.67 per cent return on its investment, it was entitled to the opportunity to recoup any increased unit cost of purchased gas through appropriate adjustment of rates.

The proposal of the company that the base average rate for the purpose of the adjustment clause should be determined at 56 per cent annual load factor was modified by the board to 60 per cent.

The board of commissioners made the following statement on this point:

> The board is of the opinion that the 56 per cent annual load factor criterion stated in the adjustment clause proposed by the company does not sufficiently recognize the admittedly better load factor of the average residential customer who does not use gas for space heating. There appears to be no precise method of determining this load factor so it becomes largely a matter of expert opinion. Without asserting that the 56 per cent criterion is wrong the board is of the opinion that 60 per cent is more acceptable under the circumstances prevailing in this case.

The principal point of difference between the company proposal and the board's position was the automatic application of the adjustment clause. The automatic increase could have a significant effect on a customer's monthly bill. As an example, the board indicated that if the supplier's proposed rates were made effective, the increase would amount to about 10 per cent of the present monthly bill of an average residential space-heating customer.

With this in mind, the board directed the company to withdraw its present proposal and to file a new one which would contain procedural safeguards so that adjustments would not be fully automatic but would receive appropriate review before they actually became effective. *Re South Jersey Gas Co. Docket No. 6127, October 29, 1952,* and to the same effect, *Re Elizabethtown Consol. Gas Co. Docket No. 6143, October 29, 1952.*

Reproduction Cost Rejected for Rate Making

A TELEPHONE company's claim that its rates should be based on the present cost to reproduce its plant was rejected by the Indiana commission. It said that such an estimate of reproduction cost is unscientific, highly speculative, and has been condemned by experts for many years. Furthermore, the use of reproduction cost estimates in rate cases is expensive and time-consuming.

On the other hand, original cost figures, when once determined, remain unchanged in all subsequent rate proceedings. Reproduction cost estimates would vary with each proceeding. The commission pointed out that Indiana statutes do not require rates to be fixed upon the basis of reproduction cost. The dominant statutory standard is that rates be just and reasonable. *Re Citizens Independent Teleph. Co. No. 23457, August 21, 1952.*

Other Important Rulings

THE supreme court of Florida held that the commission is without authority to conduct a hearing on the question of whether "usual and customary telephone service" should be discontinued on account of an alleged unlawful use, although after an actual discontinuance its jurisdiction may be invoked to obtain reinstatement of service upon a showing that a party is entitled to the facilities in service and that they will not be used in the future for unlawful purposes. *King et al. v. Seamon et al. 59 S2d 859.*

The Illinois Supreme Court held that the commission may compel a railroad to relocate its crossing of a highway and at its expense change existing structures, or may apportion the cost of repair or construction between the railroad and a municipality involved, and the fact that there is a lack of benefit to the railroad is not controlling. *Chicago Junction R. Co. et al. v. Illinois Commerce Commission, 107 NE2d 758.*

A Federal district court held that an Interstate Commerce Commission order increasing intrastate railroad rates to a percentage level of newly established interstate rates, on the assumption that the relationship of intrastate rates to interstate rates prior to the increase in interstate rates was proper, was defective in the absence of a specific finding as to what amount of revenue was required to enable the railroad to operate efficiently. *Montana et al. v. United States et al. 106 F Supp 778.*

The Civil Aeronautics Board did not consider it necessary for one of its examiners to study evidence of the extent of the public demand for an irregular air carrier's service in a proceeding in which revocation of the carrier's letter of registration was being considered for violating that section of the Civil Aeronautics Act which prohibits irregular carriers from operating too frequently or too regularly, since the evidence offered would be for the purpose of using the magnitude of the violation as an excuse for it. *Re American Air Transport & Flight School, Docket No. 5209, September 10, 1952.*

The North Carolina Supreme Court held that a contract to convey interstate motor carrier operating rights, or a bill of sale of such rights, unapproved by the Interstate Commerce Commission, but otherwise valid, confers upon the proposed purchaser the right to apply to the commission for approval. *McLean v. Keith, 72 SE2d 44.*

The Colorado commission granted a private carrier permit where the applicant made a *prima facie* showing that existing common carrier service was inadequate, or at least that former customers would receive service from the

applicant having inherent advantages of consequence over existing and available common carrier service, because the question of impairment to common carrier service did not arise. *Re Cox, Application No. 11938-PP, Decision No. 39241, September 2, 1952.*

The Colorado commission denied authority to operate a motor vehicle for the transportation of passengers where no customer witnesses were presented to testify as to the need for such service and where protestants appeared, and without contradiction, to testify that the area was adequately served. *Re Hogan, Application No. 11946, Decision No. 39358, September 24, 1952.*

The Colorado commission held that, in determining whether or not taxicab operating rights should be transferred, the question of public convenience and necessity is not involved, the principal question being as to the status of the certificate to be transferred and the financial status, operating experience, and qualifications of the proposed transferee. *Re Bussard, Application Nos. 11808-Transfer, 11809-Lease, 11810-Lease, Decision No. 39375, September 25, 1952.*

The Colorado commission held that general commodity or freight certificates included the right to transport bulk petroleum products if they were not specifically excluded and that the granting of certificates restricted to the transportation of petroleum products was never intended to give such carriers an exclusive right to that type of business. *Petroleum Carriers Conference v. Gibson, Case No. 5038, PUC No. 1321, Decision No. 39388, September 25, 1952.*

The Wisconsin commission held that modified telephone rates that would yield a return of 6.5 per cent were reasonable and just. *Re Stockbridge & S. Teleph. Co. 2-U-3825, September 5, 1952.*

Titles and Index

Preprints in This Issue of Cases to Appear in PUBLIC UTILITIES REPORTS

TITLES

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Public Utilities Reports (New Series) are published in five bound volumes a year, with the PUR Annual (Index). These Reports contain the cases preprinted in the issues of PUBLIC UTILITIES FORTNIGHTLY, as well as additional cases and digests of cases. The volumes are $7.50 each; the Annual (Index) $6.00. *Public Utilities Reports* also will subsequently contain in full or abstract form cases referred to in the foregoing pages of "Progress of Regulation."

MARYLAND CIRCUIT COURT NO. 2 OF BALTIMORE CITY

Chesapeake & Potomac Telephone Company of Baltimore City

v.

Public Service Commission

September 15, 1952

APPEAL *from order authorizing telephone rate increase; reversed. For Commission decision, see (1952) 93 PUR NS 215.*

Return, § 9 — Fair value basis.

1. Public utility rates must be based upon value rather than upon investment, p. 132.

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2. Current value is a factor to be determined in fixing public utility rates, and current cost (of reproduction) in determining that factor must be considered and given such weight as its relation to current value merits, p. 132.

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3. No consideration should be given to sudden or temporary price fluctuations in determining value for rate-making purposes, p. 132.

Valuation, § 79 — Present value — Price indices.

4. Present value cannot be determined by the use of price indices or any formula based on the purchasing power of the dollar but should be based upon the evidence of engineers, builders, manufacturers, and dealers in the articles, separately or together, which make up the telephone plant and property, p. 132.

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5. Market prices, where obtainable, are the only reliable guide to value for rate-making purposes, p. 132.

Return, § 41 — Capital structure as factor — Possible tax economies.

6. Tax economies which might be realized through the adoption of a 45 per cent debt ratio should be considered in determining a proper return for a telephone company having a capitalization entirely of common stock, but which is a wholly owned subsidiary of a company benefiting from income tax savings by reason of its capital structure, p. 137.

Valuation, § 299.1 — Working capital allowance — Effect of tax accruals.

7. No working capital allowance was made to a telephone company which had accrued taxes in advance of payment sufficient to meet working capital requirements, p. 138.

Expenses, § 87 — Payment to parent telephone company — License contract.

8. The burden of proof of the propriety of increases in charges made by a parent telephone company for services rendered its subsidiary operating company under a license contract rests upon the company making the charges, since the Commission may not assume that the increases are proper without proof, p. 140.

APPEARANCES: Clarence W. Miles, William G. Gassaway, and William B. Rafferty, for the telephone company; Charles D. Harris, General Counsel, for the Commission; Joseph Allen, Peoples' Counsel, Norman C. Melvin, Jr., Assistant Peoples' Counsel, and Ward B. Coe, Jr., Special Assistant to the Peoples' Counsel, for the state of Maryland; H. Donald Schwaab and Hugo A. Ricciuti, Assistant City Solicitors, for the mayor and city council of Baltimore.

SMITH, CJ.: On March 11, 1952, 93 PUR NS 215, the Public Service Commission (a) fixed the fair value of the property of the Telephone Company (intrastate) at $118,279,156.

(b) Authorized the company to increase the coin box charge from 5 to 10 cents.

(c) Denied other or further increases in charges for telephone service.

On March 31, 1952, the company appealed to this court from (a) and (c), asking that these portions of the order be declared illegal, null and void, and requesting that the court remand the case to the Commission with direction to redetermine the rate base according to rules, guides, and standards of law, as determined by the court. A demurrer to the bill was overruled.

On May 10, 1952, peoples' counsel and mayor and city council of Baltimore filed their bill in this court asking that (a) and (b) be set aside, and that the Public Service Commission be permanently enjoined from fixing the fair value of the property of the telephone company in excess of net original cost. The telephone company received permission to intervene in that case, and answered the bill, as did also the Commission. The two cases were consolidated for hearing, and were heard together on July 28th and 29th.

History of the Litigation

The company had applied to the Commission in 1946 (Case No. 4822) and again in 1948 (Case No. 4968) for increases in its rates, tolls, and charges. In each of these cases evidence of the then fair value of the company's property was presented and considered, and in each the Commission fixed a fair value. (See 38 Md PSC 75, 70 PUR NS 97; 40 Md PSC 54, 78 PUR NS 286.) There was no appeal to the courts from the Commission's orders in these cases. They must, for the purpose of this case, be regarded as final, binding, and conclusive on all parties. (Code Art 23, §§ 359, 396, 415; Gregg v. Public Service Commission [1913] 121 Md 1, 32, 87 Atl 1111; Purnell v. Ocean City, 162 Md 169, 174, PUR1932C 166, 159 Atl 359; Potomac Edison Co. v. Public Service Commission [1933] 165 Md 462, 472, 1 PUR NS 339, 169 Atl 480.)

In this case (Case No. 5176) 93 PUR NS 215, the company offered (over the objection of peoples' counsel and the city) all its testimony of value in the previous cases, and attempted to bring "present fair value" down to date by offering evidence of additions and retirements since, and the use of price indexes to reflect present cost of reproduction. The result is to make the record in this case three times the size of the record in an ordinary rate case.

In Case No. 4822, *supra,* the Commission allowed $1,513,000 in the rate base to reflect the excess of current cost of reproduction over book cost: in Case No. 4968, $2,136,172, and in the present case (No. 5176) $3,060,139. The company claims in the present case an excess of about $25,000,000.

Previous Litigation

Two previous rate cases shed some light on the present controversy. In 1925 there was a considerable inflation following World War I. The company asked the Commission for increased rates based upon the then value of its property in the light of increased costs. The Commission allowed increased rates based on a value $1,000,000 in excess of book value. The company appealed to the United States court, where the case was heard by Judges Rose, Groner, and Soper. The court decided that the rate base should be increased by at least $6,000,000 over book value, using a Department of Commerce index of purchasing power of the dollar to reach that result. The company and the Commission accepted the result, and there was no appeal. But from comments in the opinion in West v. Chesapeake & P. Teleph. Co. (1935) 295 US 662, 678, 79 L ed 1640, 8 PUR NS 433, 442, 55 S Ct 894, it is apparent that, if there had been an appeal, the order would have been reversed. The opinion by Judge Rose is reported in Chesapeake & P. Teleph. Co. v. Whitman (DC Md) PUR1925D 407, 3 F2d 938.

In 1933, during the depression, the Public Service Commission revalued the property of the company, in the light of lower prices and wages, at some $7,000,000 less than book value. The company again appealed to the United States court, where the case was heard by Judges Soper, Coleman, and Chesnut, who decided that the proper value was book value less depreciation reserve, and enjoined the operation of the Commission's order. An appeal was taken to the Supreme Court. The lower court opinion by Judge Chesnut is reported in Chesapeake & P. Teleph. Co. v. West (DC Md 1934) 3 PUR NS 241, 7 F Supp 214. The opinion of the Supreme Court, affirming the court below, is reported in West v. Chesapeake & P. Teleph. Co. *supra.* The *ground* of affirmance was that the *method* employed by the Commission to value the property (an average of price indexes of various kinds) was contrary to due process of law, and not approval of the lower court's conclusion, as to which it was said:

"The opinion in essence consists of the conclusion that, all the circumstances considered, it will be fair to appraise the property at cost less depreciation reserve. This rough and ready approximation of value is as arbitrary as that of the Commission,

for it is unsupported by findings based upon evidence." (West v. Chesapeake & P. Teleph. Co. *supra,* 295 US at p. 679, 8 PUR NS at p. 443.)

The Law

[1–5] Counsel for the Telephone Company say that this is a test case to determine whether Smyth v. Ames (1898) 169 US 466, 42 L ed 819, 849, 18 S Ct 418, is still the law of Maryland. That case held that the basis of all calculations as to reasonableness of rates must be the fair value of the property used for the public convenience.

"And in order to ascertain that value, the original cost of construction, the amount expended in permanent improvements, the amount and market value of its bonds and stock, the present as compared with the original cost of construction, the probable earning capacity of the property under particular rates prescribed by statute, and the sum required to meet [certain] operating expenses, are all matters for consideration, and are to be given such weight as may be just and right in each case."

This case has been cited and approved by the court of appeals of Maryland. (Havre de Grace & P. Bridge Co. v. Public Service Commission, 132 Md 16, PUR1918D 484, 103 Atl 319; Public Service Commission v. United R. & Electric Co. 155 Md 572, 599, PUR1928D 141, 142 Atl 870.) Its rationale was made the basis of the decision in the Havre de Grace Bridge Co. Case.

But it has been repudiated by the Supreme Court. (California R. Commission v. Pacific Gas & E. Co. [1938] 302 US 388, 82 L ed 319, 21 PUR NS 480, 58 S Ct 334; Federal Power Commission v. Natural Gas Pipeline Co. [1942] 315 US 575, 86 L ed 1037, 42 PUR NS 129, 62 S Ct 736; Federal Power Commission v. Hope Nat. Gas Co. [1944] 320 US 591, 88 L ed 333, 51 PUR NS 193, 64 S Ct 281.)

"While the opinion of the court erases much which has been written in rate cases during the last half century, we think this is an appropriate occasion to lay the ghost of Smyth v. Ames (1898) 169 US 466, 42 L ed 819, 18 S Ct 418, which has haunted utility regulation since 1898. That is especially desirable lest the reference by the majority to 'constitutional requirements' and to the 'limits of due process' be deemed to perpetuate the fallacious 'fair value' theory of rate making . . ." (Federal Power Commission v. Natural Gas Pipeline Co. *supra,* 315 US at p. 602, 42 PUR NS at p. 147, concurring opinion of Black, Douglas, and Murphy, JJ.)

Only one or two quotations are necessary to show how far this repudiation has extended. Chief Justice Hughes, in delivering the opinion of the Court in the Pacific Gas Co. Case, *supra,* 302 US at p. 399, 21 PUR NS at p. 487, said:

"In the instant case we cannot say that the Commission, in taking historical cost as the rate base, was making a finding without evidence and therefore arbitrary."

In the United Railways Case, *supra,* 155 Md at p. 601, PUR1928D at p. 170, Judge Offutt, speaking for the court of appeals, said:

"It is an elementary principle, not only of constitutional law, but of common right, that such a company must

be permitted to earn such an increase as will not only yield a fair return on the fair value of its property, but which will be sufficient to enable it to keep its property at a constant level of efficiency, so that it will be adequate for the public needs, and so that the value upon which the return is based will not be lessened. Anything more than that would be unjust to the public, anything less than that would be unjust both to the public and to the company. For the public should not be required to pay rates based upon the present value of the property if that value is to be permitted to steadily depreciate, nor, should the company's property be consumed in the public service without adequate provision for restoring to it the equivalent of its value. So that the company is entitled to such an allowance as will not only adequately provide for current repairs, but for depreciation due to necessary retirements, obsolescence, and the diminishing utility of property which cannot be arrested by repairs."

In approving that portion of the decision of the court of appeals, the Supreme Court said:

"The allowance for annual depreciation made by the Commission was based upon cost. The court of appeals held that this was erroneous and that it should have been based upon present value. The court's view of the matter was plainly right. One of the items of expense to be ascertained and deducted is the amount necessary to restore property worn out or impaired, so as continuously to maintain it as nearly as practicable at the same level of efficiency for the public service. The amount set aside periodically for this purpose is the so-called depreciation allowance. Manifestly this allowance cannot be limited by the original cost, because, if values have advanced, the allowance is not sufficient to maintain the level of efficiency." (United R. & Electric Co. v. West, 280 US 234, 253, 74 L ed 390, PUR1930A 225, 231, 50 S Ct 123.)

But note the opinion of the court in the Hope Gas Co. Case:

"Only a word need be added respecting depletion and depreciation. We held in the Natural Gas Pipeline Co. Case (1942) 315 US 575, 86 L ed 1037, 42 PUR NS 129, 62 S Ct 736, that there was no constitutional requirement 'that the owner who embarks in a wasting asset business of limited life shall receive at the end more than he has put into it.' 315 US at p. 593, 42 PUR NS at p. 142. The circuit court of appeals did not think that that rule was applicable here because Hope was a utility required to continue its service to the public and not scheduled to end its business on a day certain as was stipulated to be true of the Natural Gas Pipeline Co. But that distinction is quite immaterial. The ultimate exhaustion of the supply is inevitable in the case of all natural gas companies. Moreover, this court recognized in Lindheimer v. Illinois Bell Teleph. Co. (1934) 292 US 151, 78 L ed 1182, 3 PUR NS 337, 54 S Ct 658, the propriety of basing annual depreciation on cost. By such a procedure the utility is made whole and the integrity of its investment maintained. No more is required. *We cannot approve the contrary holding of United R. & Electric Co. v. West,* 280 US 234, 253, 254, 74 L ed 390, PUR1930A 225, 230, 50 S Ct 123." (Emphasis supplied.) (Federal

Power Commission v. Hope Nat. Gas Co. *supra,* 320 US at p. 606, 51 PUR NS at p. 202.)

It must be apparent that the depreciation allowance (whether based on original or present cost) goes to the heart of the question. For example, a company exhibit shows that a telephone pole which cost $9 prewar now (i.e. at the time of the hearing before the Commission) costs $19. A depreciation allowance based on cost will merely make good the investment of $9 at the end of the useful life of the pole, and provide enough money to buy slightly less than one-half of a new pole. It appears that the Supreme Court has swung over completely to the "prudent investment" theory of rate making. Missouri ex rel. Southwestern Bell Teleph. Co. v. Public Service Commission, 262 US 276, 67 L ed 981, PUR1923C 193, 43 S Ct 544, 31 ALR 807, dissenting opinion of Brandeis and Holmes and has completely discarded the "fair value" theory of Smyth v. Ames, *supra.*

The inherent defects in the "fair value" theory pointed out in Justice Brandeis' opinion (and subsequent dissents) are accentuated, stand out in bolder relief, when the formula is applied to the telephone company, all of whose stock is owned by the American Telephone and Telegraph Company. Of the elements to be weighed in determining fair value, only original cost is a fact which may be determined precisely. Earnings are a question begging element, since they are fixed by the rate-making body. The sum required to meet operating expenses is a forecast. And the present cost of construction must at best be an estimate, a matter of opinion. These defects have been frequently pointed out in court opinions, and by the Commission in previous cases. I shall not dwell on them.

But the principle objection to the formula is the prominence given to reproduction cost, and the implication that present cost reflects present value. It would cost three or four times as much to reproduce a 1932 automobile, but the car would sell for only a fraction of cost. On the other hand, a uranium mine might well be worth many times its cost. The only reliable guide is market value. Where there is no market, value is a matter of opinion; and where the opinion is not backed up by money, it may be given scant weight.

Furthermore, increases in valuation are not, as a matter of practice, written up on the books of the company, whose accounts are kept in the manner prescribed by regulations (formerly of the Interstate Commerce Commission) and now of the Federal Communications Commission. No one has ever invested a dollar on the faith of any such increase (see Chesnut, J., in Chesapeake & P. Teleph. Co. v. West [DC Md 1934] 3 PUR NS 241, 7 F Supp 214). And this is standard accounting practice, followed by business corporations which are not subject to regulation (except by the Securities and Exchange Commission).

I turn now to the statute law, which controls the action of the Commission in regulating public utilities, and in particular telephone companies, to determine the Commission's duty, power, and authority. Code Art 23, §§ 344–429 (now codified as Art 78, §§ 1 to 88 inclusive, by Chap 135 § 3 of the Acts of 1951) makes it abundantly

clear that the Commission is directed to ascertain the fair value of the property of corporations subject to the provisions of the article, and allow a reasonable rate of return thereon. And the statutes have been interpreted by the court of appeals of Maryland to mean exactly that.

"It is to be borne in mind that the intent and purpose of the Public Service Commission Law was to create a Commission entrusted with the power and authority, and obligated with the duty, of regulating the public service corporations of the state, so that the users of the utility would be insured of safe and adequate service at a reasonable price, and the public utility company be allowed to charge such rates as will produce a fair and reasonable return on the investment employed in the public service; or, as was said by the Supreme Court in San Diego Land & Town Co. v. National City (1899) 174 US 739, 757, 43 L ed 1154, 19 S Ct 804: 'What the company is entitled to demand in order that it may have just compensation is a fair return upon the reasonable value of the property at the time it is being used for the public.' It is such a valuation which § 385 (now 396) of Art 23 of the code of 1924 authorizes the Public Service Commission to make; the language being: 'The Commission shall, whenever it shall deem it desirable to do so, investigate and ascertain the fair value of the property of any corporation subject to the provision of this sub-title and used by it for the convenience of the public . . .'" (Miles v. Public Service Commission, 151 Md 337, 344, PUR 1926D 610, 617, 135 Atl 579, 49 ALR 1470.)

A reading of other opinions of the court confirms this interpretation. (Havre de Grace & P. Bridge Co. v. Public Service Commission, 132 Md 16, PUR1918D 484, 103 Atl 319; Public Service Commission v. United R. & Electric Co. 155 Md 572, PUR 1928D 141, 193, 142 Atl 870.)

It is certain, I believe, that by direction of the legislature of Maryland, rates for public utilities must be based upon value and not upon investment. If there were any doubt, the provision of the statute granting an appeal to the courts from a valuation by the Commission should set that doubt at rest (Potomac Edison Co. v. Public Service Commission [1933] 165 Md 462, 1 PUR NS 339, 169 Atl 480). So that, whether we like it or not, and whether or not Smyth v. Ames, *supra,* has been discredited in the Supreme Court, current value is a factor to be determined, and current cost (of reproduction) in determining that factor must be considered, and given such weight as its relation to current value merits.

But the law does not contemplate any short cuts in a valuation proceeding. A valuation, when fixed, was expected to endure for some years (Public Service Commission v. United R. & Electric Co. *supra,* 155 Md at p. 584). And the valuation proceeding was expected to be lengthy and thorough. The statute (§ 396) directs:

"For the purpose of such investigation the Commission is authorized to employ such engineers, experts, and other assistants as may be necessary. Such investigations shall be prosecuted with diligence and thoroughness, and the results thereof reported to the legislature at each regular session."

Counsel for the company assert that the company's evidence of reproduction cost is *uncontradicted*, and this assertion was not denied by the city, state, and peoples' counsel. The company claims that the Commission has paid merely lip service to present value, and has given only token recognition to reproduction cost. On the other hand it is urged that the evidence of reproduction cost is so highly conjectural, artificial, and subject to such frailties of judgment as to make it wholly unreliable. But it is conceded that "There was no evidence of value in the case other than the alleged evidence of reproduction cost and net original cost as shown on the company's books." By concession of both sides, therefore, there is no evidence in the case which supports the Commission's conclusion that present value is (so low as) or (so high as) $923,967 more than was fixed as present value in Case No. 4968.

Counsel urge the court to tell the Commission what weight should be given to reproduction cost, since the courts have yet laid down no precise rule—that it would be helpful to the Commission not only in this case but in future cases. I can only say that evidence of reproduction cost should be received with caution, since it must be based upon opinion, which is subject to bias. That it should be given such weight only as it reflects upon current value, and that current value should be recognized only in so far as it may with confidence be regarded as lasting —that is to say, will endure for several years to come. No consideration should be given to sudden or temporary price fluctuations. (West v. Chesapeake & P. Teleph. Co. [1935] 295 US 662, 678, 79 L ed 1640, PUR NS 433, 442, 55 S Ct 894. Present value cannot be determined by the use of price indices nor any formula based on the "purchasing power of the dollar." It should be based upon the evidence of engineers, builders, manufacturers, and dealers in the articles separately or together which make up the telephone plant and property. Where market prices are obtainable they are the only reliable guide to value. To what extent reproduction cost reflects current value is a factual question to be determined by the Commission upon evidence to be presented before it.

The current inflation is something that one cannot fail to be aware of, even painfully aware of. But the court may not attempt to value the telephone company's plant by such an awareness, nor even to place limits upon the Commission's valuation in such manner. The Commission must be guided by the evidence before it, and, in reviewing its action, I must be similarly guided.

"Of course, the Commission being a quasi-judicial tribunal must act solely on the evidence before it, and not on knowledge or information otherwise acquired by it . . . ." (Bosley v. Quigley [1948] 189 Md 493, 508, 73 PUR NS 511, 520, 56 A2d 835; Hyman v. Tyler [1947] 188 Md 301, 304, 52 A2d 610; Dembeck v. Bethlehem Shipbuilding Corp. [1934] 166 Md 21, 170 Atl 158; Bethlehem-Sparrows Point Shipyard v. Damasiewicz [1947] 187 Md 474, 50 A2d 799; Chicago Junction Case [1924] 264 US 258, 263, 68 L ed 667, 44 S Ct 317.)

The Commission's conclusion, in

determining the rate base, bears no logical relation to the discussion contained in the opinion, from which it is impossible to determine how it was arrived at.

"It is well settled that 'there must be findings, stated either in the court's opinion or separately, which are sufficient to indicate the factual basis for the ultimate conclusion.'" (Kelley v. Everglades Drainage Dist. [1943] 319 US 415, 420–422, 87 L ed 1485, 63 S Ct 1141; Mayo v. Lakeland Highlands Canning Co. [1940] 309 US 310, 84 L ed 774, 60 S Ct 517; Interstate Circuit v. United States [1938] 304 US 55, 82 L ed 1146, 58 S Ct 768; Public Service Commission v. Wisconsin Teleph. Co. 289 US 67, 77 L ed 1036, PUR1933C 264, 53 S Ct 514; Wisconsin R. Commission v. Maxcy, 281 US 82, 74 L ed 717, PUR1930D 497, 50 S Ct 228; Sumner v. Spur Distributing Co. [CCA 4th 1940] 110 F2d 649; Knapp v. Imperial Oil & Gas Products Co. [CCA4th 1942] 130 F2d 1, 3; Marlborough Corp. v. United States [CA 9th 1949] 172 F2d 787; Steccone v. Morse-Starrett Products Co. [CA9th 1951] 191 F2d 197, 200.)

(Timmons v. Commissioner of Internal Revenue [CA4th 1952] 198 F2d 142, 143.)

The Commission's finding of present value of $923,967 in excess of the value determined in Case No. 4968 cannot be fairly reviewed, since it is not possible to determine how it was arrived at; it is not supported by the evidence, which showed only the value fixed in Case No. 4968, that being prima facie evidence of present value, and evidence offered by the company showing value some $23,000,000 in excess of that value. It is possible only to conclude that it is based on "knowledge or information otherwise acquired," and it must in law be regarded as arbitrary. Its action must therefore be reversed.

Taxes

[6] The rate relief granted to the company was an increase in the 5-cent pay station charge for local calls to 10 cents, estimated to yield $943,000 annually (gross) and a net return to the company of $452,640. The difference between these two figures is the Federal income tax of 52 per cent, all of which is passed on to the customer.

The company has no bonds outstanding, and all of its stock is owned by American. When money is needed for expansion, it is furnished by American, and later converted into stock. The result of the capital structure is that all of the company's net income is subject to tax (at 52 per cent) while dividends to American on the stock are 85 per cent exempt from income tax.

After receiving evidence as to the appropriate capital structure for the company, which would enable it to obtain new capital on the most economical terms, the evidence bearing therefore upon the proper rate of return to be allowed, the Commission found that it should consist of 45 per cent debt and 55 per cent equity—i.e. 45 per cent borrowings and 55 per cent stock. If the company had such a capital structure, interest paid on borrowings would apply as a credit against income, and only net income, after such charges, would be taxable. If such structure were made effective, the tele-

phone company would save, and the telephone subscribers would save more than $3,000,000 annually, while American, if it held the bonds, and did not sell, would be required to pay some $800,000 in additional income taxes. As a result of financial policy controlled by American, the company suffers a tax disadvantage of $3,000,000, and American realizes a tax advantage of $800,000.

Peoples' counsel and counsel for the city and state urge that the Commission should be required to give effect to the tax economies which might be realized by the company through the adoption of a 45 per cent debt ratio. The company says this is a matter of internal management, and business policy, over which the Commission has and ought to have no control, and the Commission agrees.

It must be conceded that taxes, including income taxes, are a necessary and allowable expense of operation (whether reasonable or not). (Georgia R. & Power Co. v. Georgia R. Commission, 262 US 625, 67 L ed 1144, PUR1923D 1, 43 S Ct 680; Bluefield Water Works & Improv. Co. v. West Virginia Pub. Service Commission, 262 US 679, 67 L ed 1176, PUR1923D 11, 43 S Ct 675.) I agree that the Commission may not disallow the taxes actually paid, and thereby charge the company with a paper tax saving which might have been achieved by adopting a different financial structure, but, in considering what is a proper return to be allowed, the Commission may take into consideration the dollar value of the tax advantage to American, realized by reason of the existing structure. When this is put into the scale, a 6 per cent return becomes 6.7 per cent. It may be commented that the tax saving to the telephone company, and to the telephone subscribers of the state of Maryland, resulting from the employment of 45 per cent debt capital would pay a 6 per cent return on the entire $25,000,000 claimed excess of present value over book value *twice over*.

Working Capital

[7] The company claims as part of the rate base actual working capital shown on the books of the company of $655,484. A similar claim for working capital was made in Case No. 4968, 41 Md PSC 44, 84 PUR NS 175, and was denied. At that time the Federal income tax rate was 38 per cent. In this case it had risen to 47 per cent and is now 52 per cent. A study by the Commission showed that tax funds supply the need for working capital, and that no other working capital is needed. The conclusion is supported by evidence, and cannot be called arbitrary or unreasonable, even though it had been the consistent practice of the Commission prior to that time to allow working capital as a part of the rate base.

Rate of Return

Here at last we reach an element of the case which may be tested by market value. For there is a market for money. (Public Service Commission v. United R. & Electric Co. 155 Md 572, 611, PUR1928D 141, 193, dissenting opinion of Parke, J.) In Case No. 4968, *supra*, 41 Md PSC at p. 64, 84 PUR NS at p. 199, the Commission found an assumed debt-equity ratio of 50–50 to be proper and fixed the rate of return at $5\frac{1}{2}$ per cent

In the present case it fixed the rate of return at $5\frac{3}{4}$–6 per cent or 5.875 per cent, and the debt equity ratio at 45–55 per cent.

But the C. & P. Telephone Company has made no offerings of either bonds or stock in the public market. The cost of capital to it is therefore unknown. All of its stock is owned by American Telephone and Telegraph Company, and it has no bonds outstanding. The current cost of capital to it must rest upon the opinion of experts, without the benefit of actual market test.

Mr. Martindell, witness for the company, laying a basis for his own opinion, starts out by rejecting the experience of American, and rests his conclusion on the experience of electric light and power companies (which are also subject to public rate regulation). He puts the cost of debt capital at 3.25 per cent, and of equity capital at 10 per cent, averaging the same (on his own suggested debt equity ratio of 35 per cent–65 per cent) at 7.75 per cent (on the Commission's ratio of 45 per cent–55 per cent the cost would average 6.69 per cent). He failed to explain why, since all capital of the local company comes from American, the experience of American in raising capital should not be considered, and failed to offer any good reason for charging the local company a higher price than the cost to American. American has raised additional capital over the past several years by issuing debenture bonds convertible into stock at graduated prices. Its most recent issue (last July) was at $3\frac{1}{2}$ per cent convertible into stock beginning at 136. As debt capital, the cost was $3\frac{1}{2}$ per cent, as equity capital the cost was 6.6 per cent, and the combined cost (on the Commission's debt equity ratio) was 5.2 per cent. At the time of the hearing before the Commission the cost of both debt and equity capital was lower.

Of the nineteen Bell System operating companies, seven (like the Maryland Company) have no bonds outstanding, while twelve have bonds outstanding. The average debt ratio for all nineteen operating companies at the hearing was 27.15 per cent. In short, where the operating companies obtain a reasonable part of their capital by borrowing, the telephone subscriber obtains service at a correspondingly lower cost, through the saving in Federal income tax.

In Maryland, on the contrary, the expansion of the telephone system must be financed by providing the company on the expanded plant bought at present high prices, a return of *more than double* the amount which the law calls reasonable *before taxes* in order that the company may realize that reasonable return net *after taxes*. For every dollar provided to the company the public must furnish \$2.08. This result is wholly unjust and unreasonable, and one which the law never contemplated.

Mr. Morrel, vice president and general manager of the company, testified, when questioned about the financial structure, "It is my conviction that decisions as to methods of financing should not be based on a tax avoidance policy." Mr. Martindell replied merely "I do not practice tax avoidance." These pious declarations should not deceive the Commission. They would carry no weight in the

market, where investors are interested only in earnings *after taxes.*

If the telephone company were competing with others, you may be sure it would be availing itself of all possible economies in operation, *including tax economy.* That it does not adopt a financial structure which will produce such economies is due to the fact that American T. & T., its only stockholder, realizes a tax advantage from the all stock structure which, as I have pointed out, amounts to seven-tenths of one per cent. The tax rate on American's income is 17 per cent; on its dividends from the C. & P. it is only 8 per cent. And it will continue to be so just so long as the Commission permits it.

The Commission says that it *did* consider the effect of Federal income taxes on the financial structure of the company in arriving at the fair rate of return to the company. Said the Commission "While having no power to direct the issuance of bonds instead of stock, we can say that the consumer should not be required to pay more than he would have to pay if the company had availed itself of an appropriate debt-equity capital structure." (93 PUR NS 215, 239.)

But the record, and the opinion of the Commission, make it clear that no weight was given to the question of tax saving in arriving at the proper rate of return. The rate was determined after considering evidence of the current cost of capital, and only afterward was the tax saving question referred to *as a check* upon the fairness of the determination already made. This is giving the tax saving mere honorable mention and not even token recognition.

If the Commission had given effect to its declaration, and had relieved the consumer of paying more than he would pay if the company adopted the debt equity capital structure which the Commission found appropriate, there would have been a reduction instead of an increase in telephone charges.

The tax question has been considered elsewhere, and actual weight given to it. In Wisconsin, it was held to justify a fair rate of return of 5.35 per cent, which return, with the parent company's tax advantage added, became the equivalent of 5.78 per cent. (Re Wisconsin Teleph. Co. [Wis 1950] 86 PUR NS 79, and see also Re New York Teleph. Co. [NY 1951] 91 PUR NS 231; Re Interstate Power Co. [Wis 1952] 93 PUR NS 33; Re Northwestern Bell Teleph. Co. [Minn 1947] 72 PUR NS 86, 91.)

The rate of return allowed by the Commission gave no weight to tax advantage, and is therefore too high.

The License Contract

[8] The local company pays American one per cent of its gross revenue under contract for

1. Research
2. Advice on operation
3. Advice and assistance in financing
4. Patent rights

Since the gross revenues are about six times the net, the sum is substantial. At one time, when the instruments were merely leased, the fee was 4½ per cent, later, when purchased outright, reduced to 2½ per cent, then to 1½ per cent, and in 1948 to one per cent.

Of the four elements involved in the contract it is clear that three

(namely 1, 2, and 4) are highly valuable to the local company, and are furnished to it at rates (due to wholesale operation) which it could not duplicate elsewhere. When the reasonableness of the charge has been questioned (as it has been frequently) the company has usually been able to furnish evidence to show that the cost of the service exceeds the amount of the charge, and that the service is of great value to the local company.

But in these days of high prices, high wages, and high taxes, it is appropriate for the Commission to reexamine from time to time the license contract, to determine whether the costs and charges are reasonable. Certainly the cost of the services will not vary in direct ratio to the increase in gross revenue, affected as it is by price, wage and tax increases.

The assistance in financing is of undoubted value to the company. In practice, when additional funds are needed, they are advanced by American on a temporary basis, and later converted into stock. It is very convenient for the local company to have such a financial backer to call upon. And there is no reason why the cost of capital to the local company should not be determined by its actual cost to American, as I have already pointed out. But where, in determining the rate of return, the cost of obtaining capital in the open market has been estimated, there would appear to be no reason for paying a premium to American over the market cost.

As to advice in financing, I have already pointed out that the financial structure of the local company has been dictated by a selfish policy, on the part of American, which has been and is being extremely burdensome and costly to Maryland telephone subscribers. One might sum up the situation by saying that there has been no financing, and no advice; or if there was advice, it has been of no value to the local company and its customers, but has on the contrary been extremely costly to them. A charge for such services is clearly unreasonable, and should be disallowed.

It was also clearly improper to permit a charge of any amount whatever for Federal tax. Tax on the parent company's income is not a proper part of the cost of rendering service under the license contract.

While the Commission would be justified in accepting as proper the charges for services under the license contract which have already been examined and approved, it should not assume that increases are proper, without proof. And the burden of proof on the propriety of the increases should rest upon the company. (Code Art 23 § 390.)

Conclusion

In deciding the 1933 case Judge Chesnut, speaking for the 3-judge court, said:

"It is also relevant to the case to point out, that as fair valuation in this case is the same as book-cost-less-depreciation reserve, further rate litigation, so expensive primarily to the company and ultimately to the public may, it is hoped, be avoided and subsequent changes in the rates when necessary in fairness either to the company or to the public can, it is hoped, be met by action of the Commission in reducing or increasing the rate of return. The re-establishment of book value

less depreciation as the rate base will also enable the Commission to return to the principle of valuation which obtained prior to 1925 and was then regarded by the Commission as fixed and final. And it has the added advantage of enabling the accounting, for depreciation annuities or annual expense, to be hereafter as well as heretofore on the base of cost as required by the uniform system of accounting of the Interstate Commerce Commission for telephone companies . . . .

"It may be noted that, if the Commission in 1925, in view of the then prevailing economic conditions, had allowed the company a return of 8 per cent on the then long-established-rate base, the practical result would have been substantially the same, and the litigation probably avoided; and if the rate base had thus been continued without the increase then made, the Commission, in this case, by reducing the rate of return to 6 per cent, in view of the prevailing economic conditions, would have produced practically the same result now attained. The principle involved is that when a rate base for a utility has been once fairly established, changes in rates necessary from time to time in the interest of the public or the company, can nearly always be effectively made by adjustment of the rate of return, without the expense of a new valuation proceeding." (Chesapeake & P. Teleph. Co. v. West [DC Md 1934] 3 PUR NS 241, 259, 260, 278, 7 F Supp 214, 226, 238.)

The hard common sense of these observations have even greater force today than when they were made in 1933. For the Supreme Court has adopted historical cost as the measure of value, and all Federal courts and Commissions are bound to follow. Perhaps the Commission in this case was attempting to be fair to the company by raising the rate of return from 5½ per cent to 6 per cent, and changing the debt equity ratio from 50–50 to 45 per cent–55 per cent, because it felt that the company's plant had considerably increased in value since the last hearing, but was unable to determine precisely how much. Perhaps it was influenced by the fact that, in the long run, book value (where there is no market value) is the only reliable guide. I sympathize with the Commission in the difficulty of the problem.

But the Maryland legislature has enacted fair value into law—and a reasonable rate of return must be calculated upon such value. And so long as the present law remains on the books, liberality in the one will not compensate for the failure to give full measure in the other. Perhaps the legislature may be persuaded to change it.

It is not difficult to translate the claimed value increases into rate of return and vice versa, assuming one or the other to remain constant. The company sought a rise in rate of return from 5.5 per cent to 7.75 per cent or 2.25 per cent (equivalent to a rate base increase of 47 millions) and a rate base increase of 25 millions (equivalent to a rate of return increase of 1.25 per cent) a total of 72 millions, or a total rate rise of 3½ per cent. It received a rate rise from 5.5 per cent to 5.875 per cent or .375 per cent (the equivalent of $7,800,000 valuation increase) plus a valuation increase of $900,000 (the equivalent of .05 per cent rise in the rate of return), a total

rate base increase of $8,700,000 or a total rate of return increase of .425 per cent.

In some other jurisdictions it might be urged that if the end result is fair to the company and the public, the action of the Commission ought to be approved. Interference by the courts with rate regulation has even been called "back seat driving." (Federal Power Commission v. Hope Nat. Gas Co. [1944] 320 US 591, 88 L ed 333, 51 PUR NS 193, 215, 64 S Ct 281, separate opinion of Mr. Justice Jackson.) But, as I have pointed out, Maryland law requires separate determination of rate base, and rate of return. The rate base determination is not supported by substantial evidence, and must be reversed. The rate of return was established without giving weight to tax economy, and tax advantage, and must be reversed. Orders giving effect to these conclusions will be signed when presented.

FEDERAL POWER COMMISSION

Re Northern Natural Gas Company

Opinion No. 233, Docket No. G-1881
July 30, 1952

MOTION *for order dismissing proposal to increase rates and charges to the extent that issues involved have been disposed of adversely to contentions of company in previous opinion; motion granted, adjustment of rates required, and refund ordered. Application for rehearing and stay of order denied September 26, 1952.*

Orders, § 5 — Presumption as to validity — Possible review.

1. An order of the Federal Power Commission is presumptively valid when issued and continues to be so until altered or set aside by the Commission or the courts; and the fact that the order may be subject to application for rehearing or court review does not derogate from that presumption of validity, p. 147.

Procedure, § 20 — Hearing — Action based on previous decision.

2. A motion to dismiss rate proposals on the ground that the issues presented have been decided adversely to the company in another rate proceeding is not open to the objection that this would deprive the company of the hearing to which it is entitled, under § 4(e) of the Natural Gas Act, 15 USCA § 717c(e), when the company has had a full and adequate hearing on the issues involved in the motion, it appearing that the company has introduced no evidence to show that the issues under consideration have in any way changed since the Commission decided the same issues in the other proceeding, p. 147.

Procedure, § 36 — Decision settling questions.

3. The Federal Power Commission may consider as settled a matter recently presented to it and just decided, absent material changes in circumstances, p. 147.

Rates, § 655 — Increase pending decision — Partial disposition of issues.

4. A natural gas company which has been collecting increased rates under bond pending a decision under the Natural Gas Act should not be permitted to collect the full amount of such rates after the Federal Power Commission decides that, on the basis of its decision on certain issues in another proceeding, the increased rates would be unjustified, even though revenues unjustifiably collected would ultimately be refunded after a final decision; and the company should be required to file a substitute rate proposal excluding disallowed claims, subject to refund after final decision, p. 150.

Reparation, § 43 — Rates collected under bond — Partial refund.

5. A natural gas company which, pending decision on increased rates, has collected moneys under bond should be required to refund any excess collected over and above new rate schedules ordered by the Commission to be filed as a result of disallowance of part of the company's revenue claims pending final decision in the case, p. 150.

APPEARANCES: Lawrence I. Shaw, F. Vinson Roach, Dale Te Kolste, Richard J. Connor, and Mark H. Adams, appearing on behalf of Northern Natural Gas Company; Ralph F. Dresher, appearing on behalf of Iowa Electric Light and Power Company, Iowa Electric Company, and Northeastern Light and Power Company; G. M. Geyer, appearing on behalf of the Public Utilities Commission of New Ulm, Minnesota; George C. Pardee and C. F. Holdrege, appearing on behalf of the Metropolitan Utilities District of Omaha; Jack Kinney, Vernon Myers, and A. C. Rathkey, appearing on behalf of Iowa Public Service Company; Robert Willcox, appearing on behalf of the Office of Price Stabilization; L. J. Marti, appearing on behalf of Central Electric and Gas Company; Raymond A. Smith and John Fleer, appearing on behalf of Council Bluffs Gas Company; P. L. Farnand and Harry K. Wrench, appearing on behalf of the Minneapolis Gas Company; Norman H. Nitzkowski, Scott and Littman, and D. J. Reimers, appearing on behalf of the Minnesota Valley Natural Gas Company; John F. Bonner, appearing on behalf of the city of Minneapolis, Minnesota; Donald Evans and E. L. Fischer, appearing on behalf of Iowa Power and Light Company; J. A. A. Burnquist, Attorney General, and Charles A. Houston, Assistant Attorney General, appearing on behalf of the state of Minnesota; Ned Willis, appearing on behalf of the Perry Gas Company; Franklin M. Stone, Gallagher and Mamen, and George I. James, appearing on behalf of Western States Utilities Co.; Franklin M. Stone, appearing on behalf of the city of Waseca, Minnesota; Carl W. Cummins and R. R. Herrman, appearing on behalf of Northern States Power Company; Edward L. Fischer, appearing on behalf of Iowa-Illinois Gas and Electric Company and Kansas City Power & Light Company; John Jacobson, appearing

on behalf of the city of Lincoln, Nebraska, and the cities of Wilber, Crete, Wahoo, Fremont, Blair, Fairbury, all in Nebraska; William M. Serbine, appearing on behalf of the city of St. Paul, Minnesota; Bernard A. Foster, Jr., Reuben Goldberg, Harry R. Van Cleve, Jr., and Alvin A. Kurtz, appearing on behalf of the staff of the Federal Power Commission.

By the COMMISSION: This matter is before us at this time on a motion filed by Commission staff counsel on June 26, 1952, for an order dismissing the proposal of Northern Natural Gas Company (Northern) in Docket No. G–1881 to increase rates and charges, to the extent that the issues involved in said proposal have been disposed of adversely to the contentions of Northern in our Opinion No. 228 and accompanying order issued June 11, 1952, 95 PUR NS 289. Motions closely paralleling the motion filed by staff counsel were filed by intervenors city of St. Paul, Minnesota; city of Waseca, Minnesota; Minnesota Valley Natural Gas Company; and the Western States Utilities Company.

On December 26, 1951, Northern tendered for filing with the Commission its Third Revised Sheets Nos. 5 (CD–1 Schedule), 12 (G–1 Schedule), 13 (IND–1 Schedule), and 14 (IND–2 Schedule) to Northern's FPC Gas Tariff, First Revised Volume No. 2.

Northern proposed that Third Revised Sheets Nos. 5, 12, and 13 become effective on January 27, 1952, and Third Revised Sheet No. 14, on February 27, 1952.

By order issued January 25, 1952, in Docket No. G–1881, we suspended the proposed revised sheets and deferred the use of Third Revised Sheets Nos. 5, 12, and 13 until June 27, 1952, and of Third Revised Sheet No. 14 until July 27, 1952, and until such further time as said revised sheets should be made effective in the manner prescribed by § 4 of the Natural Gas Act, 15 USCA § 717c.

The revised sheets which were suspended by our order in Docket No. G–1881 were intended to supersede Second Revised Sheets Nos. 5, 12, 13, and 14 which had been filed on October 27, 1950, and which, in turn, were intended to supersede First Revised Sheets Nos. 5, 12, 13, and 14 which had been filed by Northern on March 27, 1950. On January 25, 1952, when the Third Revised Sheets were suspended in this proceeding, the First and Second Revised Sheets, proposing two increases in rates totaling $9,300,000, had been suspended in Docket Nos. G–1382 and G–1533, respectively; had thereafter become effective under bond on September 27, 1950, and April 27, 1951, respectively; and had been the subject of hearings and initial decision of a presiding examiner. Subsequently, by our Opinion No. 228 and order issued June 11, 1952, we decided the issues in Docket Nos. G–1382 and G–1533, *supra*.

Based in part upon contentions which formed the basis for part of the rate increases being sought by Northern at the time in Docket Nos. G–1382 and G–1533, Northern proposed by its Third Revised Sheets, filed in this Docket No. G–1881, to nullify the changes in the form of its rates ordered into effect by our Opinion No. 228 and order and to increase rates and charges to its customers by approximately

$10,600,000 over and above the rates proposed in its Docket Nos. G–1382 and G–1533.

Following suspension of Northern's proposals in Docket No. G–1881, we issued an order on February 29, 1952, fixing March 17, 1952, as the date at which public hearing would commence. We ordered specifically therein that at that hearing Northern shall go forward with the burden of proof imposed upon it and present its justification with respect to the issues raised by the above order of suspension issued January 25, 1952.

Public hearings were held on March 17, 18, 20, 21, 24, and 25, 1952. Northern at that time presented evidence in justification of the proposed increase, and the hearings were thereafter recessed, pending further order of the Commission. On the day of the recess Northern announced on the record that it was not in a position to complete the presentation of its evidence in justification of the proposed increase with respect to the matter of rate of return and requested permission to present such testimony at a later date. Although this request is pending before us, it is not relevant to the disposition of the present motion. For rate of return is not one of the issues which staff counsel's motion asserts was disposed of by our Opinion in No. 228, *supra,* and accompanying order, and for purposes of the motion only Northern's claimed rate of return of 6½ per cent is accepted by staff counsel.

Subsequent to the recess of the hearings in Docket No. G–1881 on March 25, 1952, by Opinion No. 228, and order issued June 11, 1952, in Docket Nos. G–1382 and G–1533, *supra,* we disposed of certain issues common to Northern's proposals in those dockets, and in this docket, adversely to Northern's contentions, as follows:

(a) Held that Northern may not maintain its separate schedules identified as G–1, IND–1, and IND–2 and required all sales to be made under prescribed Rate Schedule CD–1, Contract Demand Service, and Rate Schedule R–1, Interruptible Over-Run Service (Opinion No. 228, mimeo. ed. pp. 3–7, 95 PUR NS at pp. 295–297);

(b) Rejected Northern's contention that each thousand cubic feet of gas it produces in the Hugoton field in Kansas must be "attributed" a value of eight cents (*id.* pp. 7, 8, 95 PUR NS at pp. 297, 298);

(c) Rejected Northern's contentions respecting cost classification and allocation of common costs into demand and commodity components (*id.* pp. 24–30, 95 PUR NS at pp. 305–308);

(d) Rejected Northern's contentions respecting computation for test-year purposes of its liabilities for state property taxes and Federal income taxes (*id.* pp. 20, 21, 95 PUR NS at pp. 303, 304);

(e) Rejected Northern's contentions for a billing demand ratchet of 100 per cent of contract demand (*id.* pp. 32, 33, 95 PUR NS at pp. 308, 309);

(f) Held that the working capital allowance should be computed by deducting 75 per cent of the amount provided by customers to meet Northern's Federal income tax liability in advance of the time when the liability must be met (*id.* p. 13, 95 PUR NS at pp. 299, 300);

(g) Held that interest during con-

struction on corporate funds should be computed at 6 per cent and refused to allow the capitalization of interest during construction at rates which would result in a high profit during construction (*id.* p. 11, 95 PUR NS at p. 299).

Following this decision in Docket Nos. G–1382 and G–1533, Commission staff counsel filed the motion to dismiss here under consideration. Staff counsel contends that on the basis of Northern's own showing at the hearings, Northern is claiming revenues in its Docket No. G–1881 of $7,601,853 attributable to these seven issues, and moves us for an order at this time dismissing Northern's application in respect to these seven issues. On that same day, and subsequently on July 24, 1952, motions were filed by Northern, pursuant to the provisions of § 4(e) of the Natural Gas Act, 15 USCA § 717c(e), to make Third Revised Sheets Nos. 5, 12, and 13 effective on June 27, 1952, and Third Revised Sheet No. 14 effective on July 27, 1952, which dates mark the termination of the maximum suspension period of five months for the changes sought to be effected by those rate sheets. Such Third Revised Sheets would replace Prescribed Second Revised Sheets Nos. 5, 12, 13, and 14. Prescribed Sheets 12, 13, and 14 are cancellation sheets deleting from Northern's tariff Rate Schedules G–1, IND–1, and IND–2.

Following the filing of Commission staff counsel's motion to dismiss, the Commission, by order issued July 3, 1952, fixed July 14th as the date for the submission of briefs with respect to the motion, and July 17th as the date for oral argument on that motion.

The motions of the cities of St. Paul and Waseca, Minnesota, the Minnesota Valley Natural Gas Company, and the Western States Utilities Company, intervenors in this proceeding, were set for argument together with Commission staff counsel's motion, and were heard on the same day, July 18th. At that time we also heard oral argument of counsel representing Northern and of counsel representing intervenors in support of the motion, Public Utilities Commission of New Ulm, Minnesota, Metropolitan Utilities District of Omaha, Northern States Power Company, Minneapolis Gas Company, Perry Gas Company, and Central Electric & Gas Company.

[1–3] We note at the outset the statement made at the oral argument by counsel for Northern that the issues brought before us by this motion are substantially identical with the issues disposed of adversely to Northern's contentions in our Opinion No. 228, 95 PUR NS 289, the only difference being a technical one that different volumes of gas are here involved than were involved in Northern's previous two filings. Northern contends, however, that we may not grant staff counsel's motion on the basis of our previous determination of the same issues in our Opinion No. 228, issued June 11, 1952, *supra,* since, it alleges, to do so would deprive Northern of the hearing provided for in § 4(e) of the Natural Gas Act, and, further, because, it contends, Opinion No. 228 and accompanying order is not a final order of the Commission, but is subject to rehearing on application of Northern and to possible court review.

We do not feel that either of the two grounds of opposition to staff coun-

sel's motion presents any obstacle to a favorable decision of that motion at this time.

Considering the latter ground first, it is well settled by the courts that a Commission order is presumptively valid when issued, and that it continues to be so until altered or set aside by the Commission or by the courts. The fact that the order may be subject to application for rehearing and court review does not derogate from that presumption of validity. The Supreme Court has said that, "the Commission's order does not become suspect by reason of the fact that it is challenged. It is the product of expert judgment, which carries a presumption of validity." Federal Power Commission v. Hope Nat. Gas Co. (1944) 320 US 591, 602, 88 L ed 333, 51 PUR NS 193, 200, 64 S Ct 281; Panhandle Eastern Pipe Line Co. v. Federal Power Commission (CA8th 1949) 83 PUR NS 603, 179 F2d 896, 902. In fact, to secure a court stay of a Commission order, because of this presumption of validity, a showing of irreparable injury is not enough to warrant the issuance of a stay. The petitioner for such a stay must show that there are such substantial questions involved as tend to create reasonable doubts about the order. It seems to us that we should accord to our own decisions at least the dignity which courts accord to them.

Any question of the wisdom or legality of the order issued June 11, 1952, *supra,* can now be prosecuted only by the means provided in § 19 of the Natural Gas Act, 15 USCA § 717r. An attack on that order in a different proceeding would be no more than a collateral attack and would merit only prompt dismissal.

As to Northern's first contention to which we now return, that granting staff counsel's motion would deprive Northern of a hearing to which it is entitled, we find that Northern has had a full and adequate hearing on the issues involved in this motion.

As we have already pointed out, in our order of February 29, 1952, setting the application in Docket No. G-1881 for hearing on March 17, 1952, we afforded Northern an opportunity to present its full case at that time. Northern did so, with the sole reservation as to rate-of-return testimony. This testimony, as we have indicated above (*supra,* p. 146), is in no way involved in this motion.[1]

We may note further that as to the issues sought to be dismissed by staff counsel's motion Northern was fully heard in its two previous dockets, Nos.

[1] On the day of the recess Northern announced on the record that it was not in a position to complete its presentation of its evidence in justification of the proposed increase with respect to the matter of rate of return and requested permission to submit such testimony at a later date. The presiding examiner ruled that the request should be made by written motion directly to the Commission. Thereafter, Northern, on April 4, 1952, filed a motion, which is presently pending before the Commission, requesting that the Commission issue an order permitting Northern to present testimony and exhibits of its rate-of-return witness, Mr. Henry Herz, in support of Northern's claim for a 6½ per cent rate of return. There was also included in the motion a request respecting the presentation of unidentified evidence on the Kansas attribution order.

With respect to this latter request, our Opinion No. 228 and order, *supra,* is, of course, dispositive thereof even if the Commission deemed the request sufficiently definitive for consideration. As to the testimony on rate of return which has been served by counsel and all parties to the proceeding, disposition of this phase of Northern's motion is relevant only with respect to the further proceedings that may be had on the balance of the claimed increase in rates.

G-1382 and G-1533. Northern has introduced in Docket No. G-1881 no evidence or testimony purporting to show that the issues in G-1881 here under consideration have in any way changed since we decided the same issues in Northern's Docket Nos. G-1382 and G-1533 in Opinion No. 228, *supra.* Nor, indeed, does Northern allege even now that there is anything other than a technical difference between them.

We find that the issues sought to be dismissed by the motion and brief of staff counsel and by the motions of intervenors cities of St. Paul and Waseca, Minnesota, Minnesota Valley Natural Gas Company, and the Western States Utilities Company are among the issues we decided in our Opinion No. 228 and accompanying order issued June 11, 1952, *supra.* The contrary is not seriously asserted by counsel for Northern. And we note that the vice president of Northern, Mr. A. B. Dilworth, testified that in Docket No. G-1881 there were presented "problems previously presented in Dockets G-1382, G-1533, and G-1607." He expressed the hope that "the ruling of the Commission on the problems presented in those dockets will provide an area for a quick settlement of the problems in this docket."

The hearing on Docket Nos. G-1382 and G-1533 covered a period of two years. There were forty-eight days of hearings and eight night sessions; the record reached approximately 6,000 pages; there were 195 exhibits and 20 items incorporated by reference. All of the issues in those dockets were voluminously briefed, and the oral argument before us consumed a day and a half. Our opinion issued June 11, 1952, *supra,* carefully treats and decides all issues presented to us. The order accompanying that opinion is the product of our considered judgment of these issues.

Issues heard in such detail and decided after careful deliberation little over a month ago need not, it seems to us, be considered anew in Docket No. G-1881. There is no allegation that conditions or circumstances have changed in any way since we issued our Opinion No. 228 and order, and we know of no change. We find that reconsideration at this time of issues decided in our Opinion No. 228 and order can add nothing to, nor can it alter, our decision on these issues, reached after hearing and careful deliberation in dockets just concluded and expressed in our opinion of June 11, 1952, *supra.*

That we may consider as settled a matter recently presented to us and just decided, absent material changes in circumstances, is clear from previous decisions of this Commission, Re Columbia R. & Nav. Co. (1933) 1 FPC 78; of the Interstate Commerce Commission, Anthony Salt Co. v. Arkansas Valley I. R. Co. (1929) 152 Inters Com Rep 208, 209; International Paper Co. v. Boston & M. R. Co. (1927) 128 Inters Com Rep 466, 470; Traugott Schmidt & Sons v. Michigan C. R. Co. (1912) 23 Inters Com Rep 684, 685; of state regulatory Commissions, Robinson-Ransbotton Pottery Co. v. New York, C. & St. L. R. Co. (Ohio) No. 6289, Oct. 16, 1930; Re Foothill Ditch Co. (Cal) Decision No. 41253, Feb. 24, 1948; and of the courts, National Labor Relations Board v. Worcester Woolen

Mills Corp. (CA1st 1948) 170 F2d 13, 16, cert den (1949) 336 US 903, 93 L ed 1069, 69 S Ct 489; Pittsburgh Plate Glass Co. v. National Labor Relations Board (1940) 313 US 146, 161, 162, 85 L ed 1251, 61 S Ct 908.

[**4, 5**] That we should require such appropriate adjustment of Northern's rates at this time is clear. Although any sums collected by Northern and later found by us to be unjustified would eventually be returned to those entitled to restitution, such procedure here would be unconscionable. Any collection and subsequent return of revenues based on an increase to which Northern is not entitled would place an undue and unnecessary burden both on Northern and on those paying the increased rates. And the payment of such increased rates would be an injustice to Northern's customers and possibly eventually to consumers dependent on such customers, where as here it is clear that any such increases must eventually be refunded.

We find upon an examination of the record and briefs before us that Docket No. G–1881 should be dismissed as to the seven issues listed, (a) through (g), inclusive, *supra,* p. 146; and as a consequence of such dismissal, that the sum of $7,601,853 of the increase proposed by Northern should be disallowed. We shall, therefore, require Northern to file a substitute Third Revised Sheet No. 5 for its proposed Third Revised Sheet No. 5 to conform with Prescribed Second Revised Sheet No. 5, and which shall name rates designed to exclude the amount here disallowed. Northern shall also file a substitute for Prescribed Original Sheet No. 12a providing a rate for interruptible overrun service in conformity with our Opinion No. 228, *supra,* and order and the order entered herein. Such substitute sheets will be effective as of June 27, 1952, subject to refund after conclusion of all proceedings in this docket pursuant to the provisions of § 4(e) of the Natural Gas Act. In light of our dismissal herein, we shall order Northern, to the extent which it has already collected moneys on the basis of its presently filed Third Revised Sheets Nos. 5, 12, 13, and 14, to refund forthwith any and all excess collected over and above the new rate schedules herein ordered filed.

Further Findings and Order

In reaching the findings and conclusions herein we have considered the motions before us, the briefs filed, and the oral argument held before us. We have taken notice of and considered our previous opinions, findings, and orders entered in other proceedings involving Northern. In the light of all these and of the findings and conclusions set forth herein the Commission further finds that:

(1) Northern's application in Docket No. G–1881 should be dismissed as to the seven issues designated (a) through (g), inclusive, *supra,* p. 146.

(2) Northern's proposed rate increase should be disallowed to the extent of $7,601,853 and Third Revised Sheets Nos. 5, 12, 13, and 14 should be dismissed.

(3) Northern should file a substitute Third Revised Sheet No. 5 for its proposed Third Revised Sheet No. 5 to conform with Prescribed Second Revised Sheet No. 5 and a substitute

for Prescribed Original Sheet No. 12a naming rates designed to exclude the amount here disallowed, such rates to be effective as of June 27, 1952.

(4) The revenues collected, pursuant to the rate schedules described in (3) above, shall be subject to refund and should be collected under bond pursuant to the provisions of § 4 of the Natural Gas Act.

(5) Northern, to the extent that it may already have collected moneys on the basis of its Third Revised Sheets, should forthwith refund any and all excess collected over and above the schedule herein ordered filed.

(6) It is appropriate and necessary in carrying out the provisions of the Natural Gas Act and in the public interest to require that Northern refund, with interest at the rate of 6 per cent per annum, to those entitled thereto, any portion of the increased rates or charges which are continued in effect and which may subsequently be found by the Commission in this proceeding not justified; that Northern bear all expense of any such required refunding; that Northern keep accurate accounts in detail of all amounts received by reason of the increased rates and charges made effective on June 27, 1952, specifying by whom and in whose behalf all such amounts were paid, reporting the same to the Commission monthly for each billing period; and that Northern furnish a corporate bond satisfactory to the Commission in the amount and conditioned as hereinafter ordered.

Commissioner Smith concurring in the findings and order (see his concurring statement in Opinion No. 228, *supra,* 95 PUR NS at p. 315). Commissioner Wimberly stated that he joins in this opinion and order but in so doing has not altered his views as expressed in his dissent to Opinion No. 228, *id.* at p. 319, for the reasons stated therein.

IDAHO PUBLIC UTILITIES COMMISSION

Re Interstate Telephone Company (General Telephone Company of the Northwest)

Case No. U-1002-2, Order No. 2163
September 25, 1952

APPLICATION *by telephone company for authority to increase rates; modified rate increase authorized.*

Valuation, § 26 — Investment basis — Current cost adjustment.

1. A current cost adjustment, to bring investment in plant down to a period some time beyond the actual close of a test year, is not a proper component

in a telephone company's rate base unless all other exhibits are adjusted to such period so that the operating results can be estimated at the same date as the rate base is determined, p. 153.

Return, § 24 — Attraction of capital — Debt ratio — Cost of bond issue.

2. The Commission found that a telephone company's earnings would have to be improved so that its stock would be more salable, where additional capital was needed to complete an expansion program and where the company's 47 per cent debt ratio made the issuance of bonds very costly, p. 154.

Expenses, § 99 — Wages — Negotiated increase.

3. Increased costs resulting from the completion of contract negotiations for wage increases are properly considered in making a rate order effective subsequent to the effective date of such increases, p. 155.

Return, § 111 — Telephones.

4. A rate of return of 7 per cent for a telephone utility was considered just, fair, and reasonable under existing economic conditions and sufficient to enable the company to maintain its credit and financial stability, p. 156.

By the COMMISSION: This proceeding was brought before this Commission by the filing of an application for authority to increase its rates and charges by the Interstate Telephone Company. After the date of the filing of this application and before the date of the hearing thereon, the applicant, by proper filings, amended its articles of incorporation changing its name to General Telephone Company of the Northwest, an Idaho corporation. The application in this proceeding was amended by order of the Commission at the time of the hearing.

This matter was set for hearing in the district courtroom, at the courthouse in Coeur d'Alene, Idaho, on July 8, 1952, at 10 A.M. Pursuant to the notice of hearing that had been served on all interested parties, the hearing was held at the time and place specified, before the entire Commission and the following appearances entered: William S. Hawkins, Attorney at Law, Coeur d'Alene, and John Robert Jones, Attorney at Law, Columbus, Ohio, appearing for the applicant; R. E. Larsen, Utilities Auditor, Boise, appearing for the Commission.

No protestants or intervenors entered an appearance during the course of the hearing.

General Telephone Company of the Northwest (hereinafter referred to as the applicant) is an Idaho corporation, with its general office and mailing address in Spokane, Washington. It owns and operates a general telephone system for hire in the states of Washington, Idaho, and Montana, and does intrastate toll business in each of these states and interstate toll business between them. In Idaho, the applicant furnishes such service through twenty-six exchanges, and provides long-distance toll service through connections with the Pacific Telephone and Telegraph Company.

The amount of the increase in gross revenues to be obtained from the increased rates as filed by the applicant with this Commission is $217,735 based on a 7 per cent return on a rate base calculated on the same basis as that developed in our Order No. 2099.

The applicant, in its presentation, contended that the reasons it is again seeking rate relief was that in the Commission's Order No. 2099 (1951) 91 PUR NS 27, no consideration or relief was granted for the wage increase granted in September, 1951; this amounted to an additional $62,704 wage costs for the state of Idaho. Nor, did the 1951 order take into consideration the increase in Federal income taxes from 47 per cent to 52 per cent, the new rate becoming effective on October 1, 1951, retroactive to April, 1951. The company further contends that increasing costs of material and supplies, necessarily purchased and used in the improvement and expansion program, results in a higher cost of plant per station added and that this has been the problem since 1946.

This Commission recognizes that the telephone industry is not immune to the effect of higher price levels, and that the applicant has pursued a constant policy toward dial conversion, and that, upon the completion of the current conversions now under construction, approximately 84 per cent of the Idaho system will be dial. That the progress made in the dial conversion program will result in certain savings in operating expenses is not contested, the only question being the amount. The savings that have been made in the conversions that have been completed are not yet apparent, due to the continued construction and conversions presently being made. But when the present conversions are completed then such extraordinary expenses as are inherent with such conversions will cease and the actual savings resulting from the dial conversion will begin to become apparent. The conversion program will apparently be completed to the exchanges contemplated by the middle of 1953, therefore, the benefits from the conversions cannot be ascertained until some time thereafter.

[1] The company in its testimony and exhibits has prepared two methods of calculating the rate base. These included one that was calculated on the weighted average for the year ended May 31, 1952, and one for the actual amount on the books as of May 31, 1952. Both methods include the same accounts and methods of calculation, the only difference being the weighted average base is an average of the monthly averages for the twelve months ending May 31, 1952. Both calculations include what is termed a current cost adjustment, that is an adjustment to bring the investment in plant down to a period sometime beyond the actual close of our test year May 31, 1952. This Commission does not believe this to be a proper component in a rate base unless all other exhibits are adjusted to such a period so that the operating results can be estimated at the same date as the rate base is determined. If we were to use the weighted average rate base, then we would establish a rate base as of November, 1951, the mid-point of the test year used in testing the reasonableness of the proposed rates, and any return found to be fair now, due to the construction program and the increased plant investment that has been placed since November, could not be realized. Therefore, this Commission will determine the rate base for this proceeding as the original cost net investment plus working capital

as of May 31, 1952, calculated as follows:

Telephone Plant in Service	$4,480,321
Telephone Plant under Construction	249,740
Tangible Portion Acquisition Adjustments	58,289
Total Plant	$4,788,350
Less:	
Depreciation and Amortization Reserve	1,171,545
Net Plant	$3,616,805
Plus:	
Working Capital	384,543
Total Rate Base	$4,001,348

It appears from the record and the testimony of the witness Boyd that the capital structure of the company as of June 30, 1952, is as follows:

Bonds	$4,650,000	47%
Bank Loans	200,000	2%
Preferred Stock	2,371,700	24%
Common Stock	2,382,000	24%
Surplus	275,000	3%
Total	$9,878,700	100%

The record further discloses that the applicant has an extensive construction program under way in Idaho, the majority of which is already under contract and in the process of construction, and that the applicant will, in order to complete its system-wide program, require $1,300,000 of permanent financing some time prior to the end of the construction year 1952 in order to maintain its bank credit for the purpose of carrying on its 1953 construction program. The record alleges that the required financing of $1,300,000 cannot be accomplished by the sale of bonds on any reasonable basis, as this type of financing would raise the debt ratio to 54 per cent which testimony indicated was too high for this utility.

[2] There are three methods by which adequate permanent capital has been raised, (1) the sale of bonds, (2) sale of preferred stock, and (3) sale of common stock. An examination of the debt ratio as heretofore discussed, the current debt ratio is 47 per cent, the issuance of further bonds would further increase this ratio. The further issuance of bonds with a debt ratio such as this could be done only under unfavorable conditions, with a cost for the bonds of 4 per cent or higher. The last bonds issued by the applicant were sold at 4 per cent only after lengthy negotiations.

The record implies that before the applicant can issue further shares of preferred stock its earnings must be improved so that it is earning at least two times the dividends on the presently outstanding shares, plus the dividends on the shares to be issued. At the close of the test year in this proceeding the dividend of the presently outstanding shares of preferred stock is covered only 2.02 times and the witness Joy testified that until this condition is improved the sale of additional shares of preferred stock is not possible.

The witness, Mr. Thomas A. Boyd, of General Telephone Corporation, developed the cost of money for the applicant at 7 per cent, applicable to average pro forma invested capital for the year 1952 as follows:

	Total Capital	Earnings Requirements
Bonds	$4,575,000	$154,875
Bank Loans	400,000	12,500
Preferred Stock	2,372,000	130,444
Common Stock and Surplus	2,733,000	410,000
Total	$10,080,000	$707,819

The return on total capital as calculated above would be ($707,819 ÷ $10,080,000) or 7 per cent. In his testimony with reference to earnings requirements for the common stock and surplus, the witness stated that after reviewing the earnings of other independent telephone companies who have sold stock recently, and appearing on Applicant's Exhibit No. 25, it was his judgment that the applicant would have to earn 15 per cent on the common equity in order to compete with other companies with like risks. The witness Joy testified that the earnings on common stock over the life of the applicant had not been adequate to maintain a definite dividend policy and that the dividend payment over the past four years had resulted in a payout of 118 per cent of earnings, thus further depleting the surplus.

The witness further testified that if the present earnings ratio continued dividends would be ultimately passed, then it would be impossible to continue any further financing. From a consideration of the entire testimony and evidence of record as to the applicant's earnings requirements, it becomes plain that such requirements are close to, but do not exceed, 7 per cent on the rate base as heretofore determined.

By applying the 7 per cent rate to the May 31, 1952, rate base of $4,001,348, the resulting net operating income of $280,094 is obtained. The pro forma results of operations year ending May 31, 1952, shows the net operating income to be derived from existing service rate is $204,704, leaving a deficiency in net operating income of $75,390. Incremental gross revenue required to affect such an increase in net operating income is $164,212 arrived at by use of conversion factor of .4591.

[3] The evidence in this proceeding discloses that at the time of the hearing negotiations for wage increases were already under way, but had not been completed. Since the hearing, this Commission is advised that contract negotiations for wage increases have been completed. The Commission is of the opinion that it is proper that such increased costs be considered in making any order effective subsequent to the effective date of such increases. The wage schedules which became effective on September 1, 1952, will increase the operating expenses applicable to the state of Idaho $36,611 annually. Therefore, if the applicant is to earn the return on a rate base as heretofore determined, we must prescribe rates that will produce the $164,212 plus the amount of the wage increase of $36,611, or a total of $200,823.

Findings

Upon consideration of the entire record herein, the Commission finds:

I

That the applicant, General Telephone Company of the Northwest, formerly Interstate Telephone Company, is an Idaho corporation engaged in the business of furnishing telephone service for hire in this state, and is a telephone company and a public utility and, as such, is subject to the jurisdiction of this Commission.

II

That the applicant is entitled to earn a fair return on a rate base in the amount of $4,001,348. Said amount

represents the original cost of the applicant's property devoted to telephone service, less the allocated depreciation reserve, plus working capital as of May 31, 1952. That the current cost adjustment as found by this Commission in Order No. 2099, *supra,* is not properly a part of the rate base.

III

[**4**] That a rate of return of 7 per cent under existing economic conditions on this rate base is just, fair, and reasonable, and will enable the applicant to maintain its credit and financial stability.

IV

That the applicant has been, and now is engaged in extensive construction programs in Idaho which it is obligated to continue by existing contracts, but, in order to carry out this program, must receive a rate of return of 7 per cent on the rate base above set forth so that it might continue its permanent financing for that purpose.

V

That at the time of the hearing in this matter, wage negotiations were under way which have been subsequently completed, resulting in increases in wages and salaries of $36,611 applicable to the state of Idaho and that this amount has been included as a part of the increase herein granted.

VI

That the applicant should be entitled to a net increase of $75,390; that, in order for the applicant to realize this amount, it will be necessary that the Commission allow for Federal and state income taxes an additional amount of $88,822, plus the $36,611 for the September 1, 1952, wage increase for a gross increase of $200,823.

VII

That the classification for exchanges for basic exchange rates should be as follows:

Group I	1- 200
Group II	201- 400
Group III	401-1000
Group IV	1001-2000
Group V	2001-3500
Group VI	3501-5000

Re Boston Edison Company

D.P.U. 10044–10047
September 3, 1952

APPLICATION *by electric company for authority to locate lines and wires across roads in certain towns; granted.*

Electricity, § 2 — Commission powers — Location of wires — Local consent.

1. The Commission has authority to grant an electric company the right to locate wires which necessarily pass through one or more cities or towns to connect to a proposed terminal if the town has refused permission, actively or passively, to cross the public way and if permission has been granted and accepted in two communities adjoining the city or town whose lack of co-operation is the reason for the proceeding, p. 158.

Electricity, § 2 — Commission power to authorize location of wires — Statutory construction.

2. The statute authorizing the Commission to grant an electric company the right to locate wires over a municipality's road if such town refuses permission, actively or passively, provided permission has been granted and accepted in adjoining communities, requires only that the towns be adjacent, and not tangent, at the point which is crossed by the transmission line, p. 159.

Electricity, § 2 — Location of transmission lines — Powers of town selectmen.

3. The fact that a proposed electric transmission line through a town is basically, socially, and economically desirable, even though location could have been routed another way, does not endow the town selectmen with less circumscribed powers than they would otherwise have over electric service to be rendered to the rest of the general territory, p. 159.

APPEARANCES: F. M. Ives and F. H. Perry, for the Boston Edison Company; Samuel Hoar, for the towns of Sudbury, Wayland, and Weston; J. Sidney Stone, representing Sarah E. Lovell, Mary E. Lovell, Ernest M. Lovell, and Mrs. Barrows.

By the DEPARTMENT: These are applications by Boston Edison Company for orders of the Department under § 28 of Chap 166 of the General Laws granting locations across certain public ways in the towns of Wayland, Weston, and Sudbury. In D.P.U. 10044, it asks for grants over ways in the town of Sudbury. Since the filing of this last petition, however, the selectmen of Sudbury have granted the necessary locations upon application to them under Chap 166, § 22, which locations have been accepted by petitioner, and the town of Sudbury has withdrawn its appearance in the proceedings here. Petitioner has accordingly filed papers requesting leave to withdraw its application in so far

as it relates to the town of Sudbury. This application is granted.

Petitioner is a company incorporated for the transmission of electricity for lighting, heating, or power under General Laws, Chap 166, § 21, and is, therefore, a company subject to said chapter under § 28. It serves about 492,000 customers' meters in Boston and some forty surrounding cities and towns. The proposed line which it is contemplated will cross the public ways in question has been the subject of several long protracted hearings in matters before us which have resulted in orders determining that public convenience and necessity requires the erection of this transmission line, granting petitioner the right to condemn a right of way therefor under § 72 of General Laws, Chap 164, and setting aside conflicting zoning restrictions under § 26 of General Laws, Chap 40, Re Boston Edison Co. D.P.U. 8272, 8272-A, 9499, 9500, 9537.

We have already found in D.P.U. 8272-A that the proposed line from the Sherborn substation to the Waltham substation is a single project, and comprises a single line under § 28. The existence of a proposed substation in Sudbury (now temporarily, at least, abandoned) does not affect such finding. Petitioner may, and very often does, establish substations from time to time whenever and wherever its load growth requires. The purpose of this proposed facility is to complete a heavy load connection between Weymouth and Millbury on the south and Mystic and Tewksbury on the north. As such, it is a vital link in petitioner's system, which must be constructed for the ultimate good of its 500,000 consumers, a very large proportion of which do not reside in either Wayland or Weston.

In its travels from Sherborn to Waltham, the proposed right of way first goes into Framingham, then crosses into Natick, thence it runs across a corner of Natick back into Framingham, thence across a small corner of Wayland into Sudbury. At Sudbury, it turns sharply and follows the central Massachusetts right of way into and across, first Wayland and then Weston and into Waltham where it connects with an existing substation. Wayland has common boundaries with Natick, Framingham, Sudbury, and Weston. Weston has common boundaries with Wayland, Natick, and Waltham.

[1] The statute, General Laws, Chap 166, § 28, authorizes us to grant these locations for a line "for the transmission of electricity . . . which will of necessity pass through one or more cities or towns to connect the proposed termini" when the electric company has been refused permission, actively or passively, by the selectmen to cross the public ways. We find that the line proposed here must of necessity pass through one or more cities or towns in order to connect the proposed termini. We also find that the selectmen of the towns of Weston and Wayland, respectively, have neglected for a period of more than three months after the filing thereof to act upon petitions for the necessary locations in their respective towns. On application to the Department, we may grant such permission if the petitioning utility "has been granted and has accepted a location for such line in two cities, or in two towns, or in a city and a town

adjoining the city or town" whose lack of co-operation is the reason for the proceedings.

[2] In construing this statute, it seems to us axiomatic that we should look with great respect to the intent of the legislature in enacting it. It is usually undesirable for high-tension lines to be erected along highways, and they are, as here, generally constructed on private rights of way. Naturally, it is impossible for such a line to extend any considerable distance without crossing a highway, however. It seems clear to us that the general court wished to make it impossible for a single town to refuse to permit a utility to cross its highways with a high-tension line designed to serve its neighbor. We are here asked whether two such towns out of a total of seven can get together and do so by their joint action. We think the statute should be construed liberally to effectuate the ultimate purpose of expediting service to the community at large. It is clear that more than two towns, to wit, Natick, Framingham, and Sudbury, which are adjacent to Wayland have granted these locations. It is also clear that a town and a city, to wit, Natick and Waltham, which are adjacent to Weston have granted such locations. There is nothing in the statute that requires that the adjacent towns be tangent at the very point which is crossed by the transmission line, and we do not believe we are required to read such words into the statute.

[3] The detail of the route by which a transmission line goes from one point to another is subject to our approval. General Laws, Chap 164, § 72. In considering such applications, we always give great weight to the effect which the proposal will have on the localities through which it passes, as we have in this very instance. See Re Boston Edison Co. D.P.U. 8272, 8272–A, *supra.* This line could have been laid out to go through, first Natick, then Wayland, then Natick, then Weston, and finally Waltham. In that case, there would be no doubt of our right to grant the instant petition. Or it could have been designed, as it was originally, to avoid the town of Weston altogether. But it just so happens that it is basically socially and economically desirable that the line run where it is now designed to run. We do not feel that this accident should endow the selectmen of Wayland or Weston with less circumscribed powers than they would otherwise have over the electric service to be rendered to the rest of eastern Massachusetts.

We find, therefore, that petitioner has been granted locations for the proposed line in two towns adjoining Wayland and in a city and a town adjoining Weston.

We have already found in our prior proceedings to which we have referred that the line in question is required to meet public convenience and necessity. We think it follows from this, and we so find, that the locations sought by these petitions are necessary for the public convenience and are in the public interest.

The parties have respectively filed requests for rulings, and have waived the 10-day limitation imposed on our consideration thereof by § 5 of General Laws, Chap 25. Of the requests submitted by the towns of Weston and Wayland, we grant Request No. 4. We deny their Requests Nos. 1, 5, 6,

and 7 and further deny their Requests Nos. 2 and 3 as inapplicable to the agreed facts. Of the requests of Boston Edison Company for findings of fact, we grant its Requests Nos. 1, 2, 3, 4, 5, 6, 7, and 8. Of its requests for rulings of law, we grant its Requests Nos. 1, 2, 3, 5, 6, 7, 8, 11, 12, 13, 14, and 15. We deny its Requests Nos. 4, 9, and 10 as being incomplete.

For the foregoing reasons, after due notice, public hearing, and consideration, it is hereby

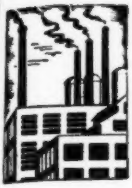
Ordered:

(1) That the petition of Boston Edison Company in DPU 10044 be and the same is hereby dismissed on request of the petitioner.

(2) That Boston Edison Company is granted locations in the town of Weston for a line for the transmission of electricity for lighting, heating, or power of sixteen wires, of which two wires shall be underground and fourteen wires shall be overhead, the said wires to be located within a strip 250 feet wide, the side lines of which are substantially as shown on plan made by E. C. Rue, dated April 3, 1951, and filed with the Department, under and above and across Concord road at Boston and Maine Railroad, Conant road at Boston and Maine Railroad, and Church street at Boston and Maine Railroad.

(3) That Boston Edison Company is granted a location in the town of Wayland for a line for the transmission of electricity for lighting, heating, or power of sixteen wires, of which two wires shall be underground and fourteen wires shall be overhead, the said wires to be located within a strip 250 feet wide, the side lines of which are substantially as shown on plan made by E. C. Rue, dated April 25, 1951, and filed with the Department, under and over and across Stonebridge road, at approximately 2,091 feet east of the Wayland-Framingham line.

(4) That Boston Edison Company is granted locations in the town of Wayland for a line for the transmission of electricity for lighting, heating, or power of sixteen wires, of which two wires shall be underground and fourteen wires shall be overhead, the said wires to be located within a strip 250 feet wide, the side lines of which are substantially as shown on plans made by E. C. Rue, dated April 3, 1951, and filed with the Department, under and over and across State road west at Boston and Maine Railroad, junction of Cochituate road, Old Sudbury road and Concord road at Boston and Maine Railroad, Plain road at Boston and Maine Railroad, and Glen road at Boston and Maine Railroad.



Industrial Progress

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Plenty of on-the-job photographs show the 95 operating under various job conditions—on all types of trenching projects.

Complete dimensions and specifications are given, including tables of optional trench widths and digging wheel and traction speed combinations.

Copies of the Cleveland Model 95 folder may be obtained without obligation by writing on business stationery to the Cleveland Trencher Company, 20100 St. Clair avenue, Cleveland 17, Ohio.

AG&E System Continues To Expand

THE second 150,000-kilowatt steam-electric generating unit at the new Tanners Creek Plant went into operation recently, according to Philip Sporn, president of the American Gas and Electric Company.

The plant, located at Lawrenceburg, Indiana, and owned and operated by the Indiana & Michigan Electric Company is one of 11 major steam-generating plants of the A. G. & E. System.

In the A. G. & E. System there now are three major power plant projects under construction in an expansion program which was accelerated by the Korean War.

In October, 1950, ground was broken near Charleston, West Virginia, for the 400,000-kilowatt Kanawha river plant of the Appalachian Electric Power Company. The first 200,000-kilowatt unit at this plant is scheduled to go into operation in April, 1953, to be followed in five months by a second unit of the same size.

Construction of the 400,000-kilowatt Muskingum river plant south of Zanesville, Ohio, was started in February, 1951. An almost exact duplicate of the Kanawha river station, this plant also will have two 200,000-kilowatt steam-generating units, both of which are scheduled for completion during the latter half of 1953.

Now under construction at Tanners Creek is a third unit, this one of 200,000 kilowatts, which will increase the capacity there to 500,000 kilowatts by fall of 1954.

These three projects will add an even 1,000,000 kilowatts to A. G. & E. System capacity to bring it up to 4,019,000 kilowatts by fall of 1954—four times what the system capacity was just before World War II.

Southern Pipe & Casing Catalog

THE Southern Pipe & Casing Company, Azusa, California, has issued a 42-page catalog which contains a wealth of information on the many interesting steps in pipe making, as well as the latest procedures in the applications of various protective coatings.

Occasion for the issuance of the new catalog is the company's celebration of its 20th anniversary in the welded steel pipe manufacturing business.

The catalog provides a great amount of up-to-date information on specifications, prices, and weights, together with the many pictorial descriptions of fittings, field joints, protective coatings and types of pipe, from 4-in. to 36-in. in diameter.

Free copies are available from the manufacturer.

Philadelphia Electric Wins Award for Annual Report

PHILADELPHIA ELECTRIC COMPANY'S annual report for 1951 was selected as best among the utility companies of the East by the *Financial World* magazine.

R. G. Rincliffe, president of the company, accepted the "Oscar" marking this award at a meeting in New York attended by more than 1300 business and financial executives from all parts of the United States and Canada.

The award was made by a board of judges which included prominent financial editors, ac-

(*Continued on page 26*)

countants, security analysts, public relations leaders, and authorities on typography. The judging involved consideration of more than 5,000 annual reports of the principal businesses and industries of the country.

Radar Used to Locate Trouble on Lines

RADAR equipment is now being used in the Chicago area to locate points of damage in high voltage transmission lines.

Developed by engineers of Commonwealth Edison Company and Public Service Company of Northern Illinois, the new equipment, known as a radar fault locator, can help pinpoint a damaged spot in an overhead transmission line or an underground cable in a matter of minutes.

The utilities, which furnish electricity in Chicago and more than 500 other communities in the northern part of the state, now have seven sets of the radar fault locators. A set weighs less than 100 pounds and can be transported in a light truck or even a passenger car.

The radar equipment operates like that used by the Army and Navy for detecting airplanes or other objects, except that its impulses travel over transmission wires instead of over air waves.

When a fault develops in a transmission line and the location of the trouble is not known, the fault locator is attached to one of the terminals of the line in a substation or generating station and the impulse travels to the point of damage then returns to the point of sending. The intricate device translates the time taken for the impulse to go out and return into distance and enables the operator to measure the approximate location of the fault. Workmen are then dispatched to repair the damage.

The Commonwealth Edison-Public Service system has approximately 4,000 miles of heavy transmission line ranging from 34,500 volts to 230,000 volts.

Atlantic City Electric Plans $27,695,000 Program

ATLANTIC CITY ELECTRIC COMPANY'S 1953-54 construction program has been accelerated to meet the growth in the utility's service area, according to B. L. England, president.

Total expenditures are estimated at $27,695,000 for the next two years, of which $14,702,000 will be spent in 1953 and $12,993,000 in 1954. The largest single item, representing over 50 per cent of the budget, is a new $13,871,000 unit at the Deepwater generating station.

EEI Issues Home Lighting Booklet

A NEW booklet entitled "Your Home Lighting Idea Book" which offers practical suggestions for the planning of home lighting and

(*Continued on page* 28)

provides lighting equipment information for the consumer, has been produced by the Edison Electric Institute.

Prepared by the EEI Residential Lighting Committee, this booklet is designed for present and prospective home owners, planners and remodelers. Specific suggestions show how the minimum lighting standards can be maintained in the home and, at the same time, how lighting can be used as a design element in home decorating.

"Your Home Lighting Idea Book" can be useful in the sales promotional efforts of utilities at home shows, demonstrations, home calls and in home economics classes, according to the Institute.

Copies of "Your Home Lighting Idea Book," are available from the Commercial Division, Edison Electric Institute, 420 Lexington Ave., New York 17, New York.

Southern Coal Appoints Girard As Sales Manager

I. B. Girard has been appointed sales manager of Southern Coal Company, according to recent announcement by S. L. Jewell, vice president and director of sales.

Mr. Girard became associated with the Southern organization in February, 1951, as sales manager of Illinois-Indiana mines, following the acquisition of the Northern Illinois Coal Corporation group of mines by Southern in December of 1950. His experience in the marketing and distribution of coal covers a span of 29 years.

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EVERYBODY'S TALKING

about this modern gas control

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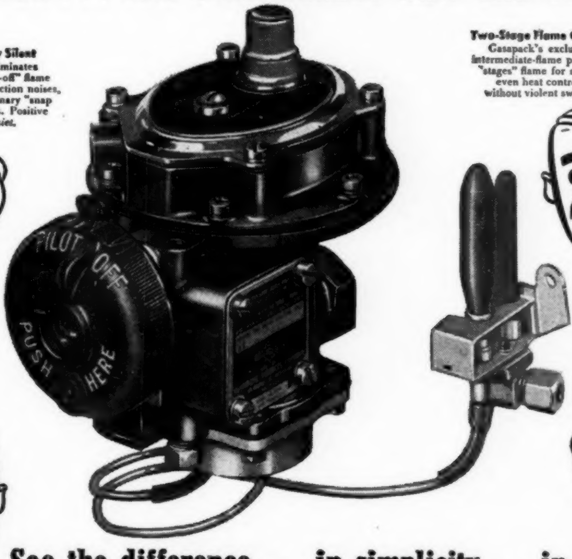
Completely Silent
Gasapack eliminates "bang-on, bang-off" flame ignition and extinction noises, common to ordinary "snap action" controls. Positive *— but quiet.*

Two-Stage Flame Control
Gasapack's exclusive intermediate-flame principle "stages" flame for steady, even heat control, without violent swings.



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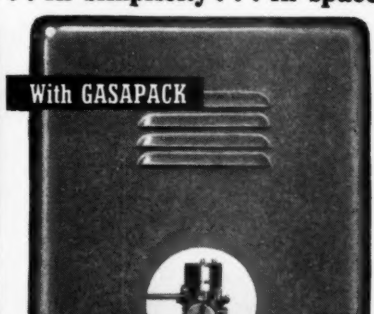
...sign allows instant ...version of manual unit ... electric thermostatic ...chanical Thermomatic ...ation, with no change in basic unit.

One Simple Unit
Combines all necessary controls in one compact unit, easy to install . . . simple to service and efficient in operation.

See the difference . . . in simplicity . . . in space saving



Compare the Gasapack with old-fashioned, cumbersome hookups, and you'll discover it's the modern, efficient way of installing modern gas furnaces and heaters. One simple-to-install unit eliminates as many as 5 separate controls. Cuts costs of assembly, too — as much as 67%.

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ss reduction alone pays for capacitors on Pacific Power & Light Co. system

Capacitors save 50,000,000 kw-hrs annually

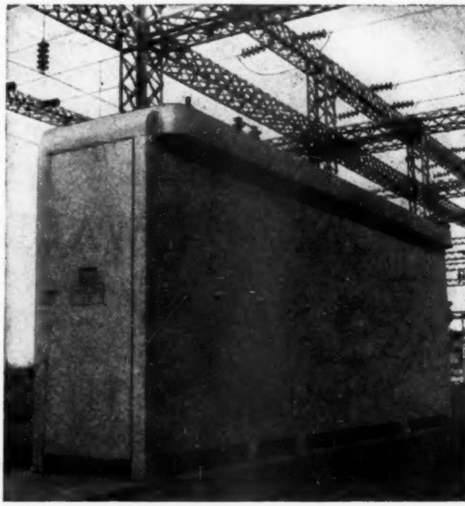
its progressive program of power-factor rovement, Pacific Power & Light has in-lled 142,000 kvar of capacitors . . . 51% tched. This amounts to 1 kvar for every 3 kw of its 345,000-kw peak-load capacity.

pacitors raise PF—reduce losses. Without se capacitors P P & L's power factor uld be 82%—annual losses 285 million -hrs. In 1951, ***with capacitors,*** its power tor was 97%—losses 235 million kw-hrs.

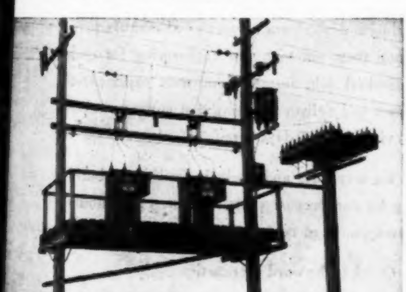
0,000 saving pays for capacitors. Even 3 mills per kw-hr this represents a $150,000 ing each year. Annual cost of carrying the 2,000 kvar of capacitors installed is $142,000 8 per installed kvar capitalized at 12½%). hus, the saving on power losses alone more an pays for the capacitors.

nus of better voltage—reduced loading. lculations show that the capacitors reduced ltage drop in overhead circuits by 23 to %, depending on conductor size and length. nd they released an estimated 15% of kw pacity. Both at no extra cost!

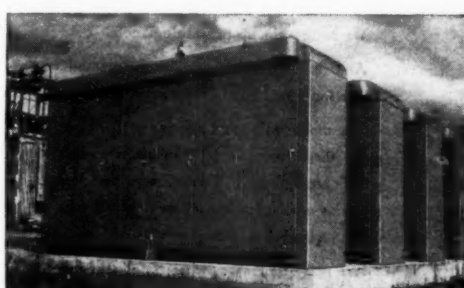
Many types of General Electric capacitors e available. They're economical to install, quire practically no maintenance. For in-rmation call your nearest G-E Apparatus les office, or write to Section 407-37E, General lectric Co., Schenectady 5, N.Y.



CAPACITORS PAY. Pacific Power & Light finds that capacitor installations such as this 3300-kvar 4-kv G-E equipment pay for themselves by reducing power system losses.



2,000 KVAR of capacitors—about 17% switched—have been installed on distribution circuits. 600 kvar of G-E capacitors above are installed next to voltage regulators near Sunnyside, Wash.



60,000 KVAR of capacitors—about 99% switched—have been installed at P P & L substations. The four 1500-kvar, 4-kv G-E equipments above are installed at the Company's Pendleton, Oregon substation.

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It is faster to

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than to

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We save days and weeks in finishing a building *for use*, because years have been put into the development of these unique skills.

Quick is the word we practice.

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